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Proceedings 5th PISB Workshop

**BEYOND THE CRISIS: WHAT IS
THE FUTURE FOR SMALL
BUSINESSES?**

Challenges, opportunities and lessons
learned

3-4 December 2021

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Introduction to the proceedings of the Piccola Impresa/Small Business 5th Workshop: “Beyond the crisis: what is the future for small businesses? Challenges, opportunities and lessons learned”

By Tonino Pencarelli, Francesca Maria Cesaroni, Paola Demartini,
Roberta Bocconcelli and Mara del Baldo

Dear readers, in this volume, we are pleased to present the proceedings of the 5th Workshop organised by the journal *Piccola Impresa/Small Business* in collaboration with the Association for the study of small enterprises (ASPI), the Research Center on Entrepreneurship and Small-medium firms (CRIMPI), the Italian Academy of Business Economics (AIDEA) and the European Council for Small Business and Entrepreneurship (ECSB). The workshop title was “*Beyond the crisis: what is the future for small businesses? Challenges, opportunities and lessons learned*”, and it took place online on December 4-5, 2021.

The aim of the conference was to bring together scholars of entrepreneurship and small and medium-sized enterprises, to discuss the emerging issues following the Covid-19 pandemic.

As we have highlighted in the call for papers of the workshop and a previous editorial published in the journal mentioned above (Pencarelli et al. 2021), the COVID-19 pandemic has triggered the largest public health crisis in living memory, with serious—and still unpredictable—consequences for the global economy. Available data clearly shows that SMEs have particularly suffered from economic downturn: their inherent weaknesses have amplified and accelerated the effects of the crisis compared to larger firms (Cowling et al., 2020; OECD, 2020). Notably, in Italy, the Covid-19 outbreak has challenged SMEs’ survival after a decade of a slow and incomplete recovery (CERVED, 2020, 2021).

The crisis has also generated the opportunity to (*re*)think about the economy and society as a whole (Barbier and Burgess, 2020), accelerating some already ongoing key trends: *innovation, digitalisation, sustainability,*

flexibility. On the one hand, these big challenges represent the future we aim for and the future we would like to build (Donthu and Gustafsson, 2020; Kumar et al., 2021). On the other hand, they mark the way forward in the face of the changes that are now unavoidable for everyone: people, firms and policymakers (Giones et al., 2020; Nadina et al., 2021).

For SMEs, this means “looking inward” to truly understand what is needed to move forward and activate those changes—in production systems, organisations and relationships with the markets—that cannot be postponed any longer (Cortez and Johnston, 2020; Modina, 2020).

Almost two years after the start of the pandemic, it is apparent that policy measures adopted by the governments of several countries worldwide, including Italy, are deemed urgent to compensate for the loss of turnover, especially in sectors more heavily affected by the crisis (Amankwah-Amoah, 2020; Gössling et al., 2020; Pencarelli et al., 2021), can only provide short-term benefits and will be insufficient to support SMEs in handling the forthcoming challenges, once the crisis is over (Liguori and Pittz, 2020; Wenzel et al., 2020).

Therefore, we must look to the future, beyond the crisis, to discover and understand the social, economic and political scenarios the SMEs will act in, and to explore the critical strategic choices and policy measures that together will allow SMEs to revitalise and return to the economic scene as protagonists (Ritter, 2020). To explore these issues, the PISB 2021 Workshop has encouraged scholars to submit both empirical and theoretical contributions that advance our understanding of how SMEs are preparing to tackle and overcome this crisis and how they can effectively address, enhance and exploit policy measures at the local, national and European level (i.e., NextGenerationEU, The UK Government’s COVID-19 Recovery Strategy) to move successfully towards this completely renewed and challenging scenario.

At the end of the refereeing process, twenty-four papers were presented at the workshop; twenty-one of them have been included in these proceedings. The authors addressed the themes of the workshop from a variety of

theoretical perspectives, proposing both qualitative and quantitative methods of investigation, as well as conceptual reflections. In agreement, the included contributions are either long abstracts or full papers. Manuscripts are presented under the title of the sessions that took place during the workshop and that refer to the main topics addressed by scholars, namely: *Sustainable Business; Marketing and Strategies; Values and Humane Entrepreneurship; COVID's Impact on SMEs; Resilience and Recovery Strategies; COVID and Business Crisis; Cross-Cultural Contexts*. During the parallel sessions, the authors exposed the salient aspects that emerged from their research and were able to receive feedback from the participants to improve and expand their papers, especially the works in progress.

The workshop was enhanced by the participation of two guest speakers: Professor Roberto Grandinetti, from the University of Padua, Italy, who discussed "The future for small businesses and their territories" and Professor John Dumay, from Macquarie University, Australia, who presented the topic: "Rethinking small business strategies during COVID-19: Identifying the job to be done ". We would like to thank both speakers for their stimulating insights and for providing a valuable platform for analysis and discussion, as well as future research.

We would also like to thank the members of the organising committee and the scientific committee for their valuable support during the workshop.

In conclusion, we would like to thank all the authors who, with their research, have contributed to the ongoing debate on such a vital topic for the future of the Italian and European economy.

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Sustainable Business

Sustainable business model and organisational resilience: a case study of an Italian winery enterprise

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Abstract

The business field has been experiencing rapid changes due to the increasing pressure from the external environment. In addition, competition is intensifying, while crises and disasters are increasingly common. In such a context, resilience – i.e. a firm's ability to tackle and/or overcome environmental pressures – has become an essential foundation for organisations. Shocks and adverse events often produce challenges for small and medium-sized enterprises, and they are particularly vulnerable during times of crises as they face significant threats to their financial performance, and sometimes even their survival. However, small and medium-sized enterprises (SMEs) can also be more innovative and resilient than larger businesses due to their size and flexibility.

By investigating the capacity to develop appropriate responses to adverse changes in the external context, this research seeks to understand how an SME in the Italian wine sector is looking to the future. In particular, the analysis focuses on the firm's

development and implementation of sustainable practices in its business model to overcome crises and revitalise its business. The case study is Cantine Settesoli, a small-medium winery enterprise located in Sicily. This firm is interesting because it “produces wine and grows the future” and operates with social responsibility and attention to sustainability while simultaneously contributing to economic and cultural community development. Cantine Settesoli is also an interesting case because in 2020 it obtained the “VIVA Sustainable Wine” certificate, which denotes sustainability in the wine supply chain, further demonstrating how sustainability is essential during a crisis.

The authors derived data from semi-structured interviews with critical company informants as well as document analysis. The results, which contribute to the understanding of the relationships between sustainability, business models and resilience, suggest that, in this case, resilience and sustainability interact. The separate objectives seem to influence each other and, in some cases, coincide have a mutual effect. In addition, the study suggests strategic approaches, also oriented towards sustainability, that generate organisational resilience to overcome crises and revitalise the business. This means that SMEs, notwithstanding the potential lack of financial (and sometimes human) resources, need to consider resilience practices as a long-term investment instead of as an immediate cost.

Keywords – Sustainability, Sustainable business model, Organisational resilience, Small-medium enterprise, Wine sector.

Paper type – Academic Research Paper

1 Introduction

During times of continuous and increasing dynamics, organisational resilience, defined as a firm’s capacity to withstand environmental changes, plays a pivotal role (Meyer, 1982; Staw et al., 1981). A growing number of works on resilience can be observed in the organisational and managerial literature, starting from 11th September 2001 and reaching into the recession period of 2007 to 2013 (Linnenluecke, 2017). Multiple definitions of resilience have been proposed over the last few years, many emerging from the increasingly frequent extreme natural phenomena caused by climate change. These have emphasised the need for the organisational ability to react to the environment’s changes through flexibility and adaptation, thereby often triggering an innovation process (Hardwick & Anderson, 2019). The shock caused by the Covid-19 pandemic was only the latest in a long line of disruptions, wherein organisations have faced several

challenges over the last few decades. The latest and most compelling of these have dealt with sustainability in both of its meanings, i.e. social and environmental. Indeed, sustainability embraces the different settings (economy, society, institutes, etc.) that contribute to sustainable development, and organisations large and small – with or without an environmental label and regardless of their business structure – are implementing some form of a sustainable business model (SBM). A SBM refers to a conceptual scheme that identifies a system of interconnected and interdependent activities related to the firm's organisational architecture. This framework outlines the processes and ways to both create value for all stakeholders and pursue economic value (Amit & Zott, 2010). Compared to a normal business model (BM), in an SBM the economic perspective is intimately tied with the social and environmental aspects and value creation is more comprehensive, involving a broader category of stakeholders (Geissdoerfer et al., 2018). Considering the landscape in which firms operate, i.e. one characterised by uncertainty and incessant dynamics, a firm's reaction reflects its critical capacity to sustain a competitive advantage (Carayannis et al., 2014). In this regard, it is possible to refer to resilience as a dynamic capability that enables firms to react to different external challenges, often by reconfiguring their BMs (Teece, 2018). At the same time, sustainability represents a chance to face external challenges, seize advantageous opportunities, and follow them through by reorganising the BM. In other words, sustainability transitions can trigger changes in the business, for example concerning the value offered to customers, the raw materials adopted in production, or how a process is carried out. These issues are discussed in the latest studies on SBMs, in which the concept of innovation represents a new trend (Bocken et al., 2013.; Carraresi & Bro, 2021). Innovation can be identified as a type of reaction to external variations, but it can also be a process that enables organisations to respond to the call to change towards sustainability, which in turn requires them to change some elements of their BMs (Bocken et al., 2013). Teixeira and Werther (2013), who considered resilience a driver for enhancing competitive advantage, concluded that resilient organisations are reactive, proactive and can also develop innovations in anticipation of buyer preferences. Hence, being resilient should promote sustainability. Inversely, being sustainable could help to activate a dynamic capability that permits the organisation to be resilient and innovate its BM frequently. This study aims to contribute to the understanding of SBMs by investigating the relationship between resilience and sustainability. Thus far, only a few works have analysed this relationship, with discordant results (Carayannis et al., 2014). This work considers small-medium enterprises (SMEs) in

particular because firstly, they are the core of many economies and often constitute the majority of firms in some countries (Burnard & Bhamra, 2011). Secondly, while SMEs are highly vulnerable and susceptible to competition, they are also, thanks to their size, more flexible (Salavou et al., 2004). Thirdly, SMEs have demonstrated resilience in terms of sustainable business involving factors such as changing market trends, changing technologies and new management methods (Gunasekaran et al., 2011). An appealing question is whether the resilience capacity of a firm conditions its sustainable orientation or whether being sustainable enables the firm to respond to external changes. Answering the call for research on the relationship between sustainability and resilience (Negri et al., 2020), this research addresses the following questions: Which one comes first – resilience or sustainability? And which one conditions the other? To answer the question above, we adopted the case study of a winery. The firm, a medium-sized business, was selected based on its recognisable sustainable behaviour, proved by its achievement of sustainability labels as well as its successful financial performance both pre- and post-Covid-19 pandemic. Furthermore, the study contributes to the understanding of aspects of SBMs and sustainable agriculture with a specific focus on the wine sector – an understudied topic that is nonetheless a matter of interest due to its significant contribution to economic and social stability (Lockshin & Corsi, 2021). Hence, the second research question is thus: How can sustainability be integrated into the business model of a winery firm?

The paper is organised as follows. The second section presents the theoretical framework. The third section briefly describes the adopted methodology, while the fourth section describes the case study. Finally, the last section focuses on the discussion of the results and conclusions.

2 Literature review

2.1 Resilience

The origins of the research on resilience in the managerial literature can be traced back to two seminal papers (Meyer, 1982; Staw et al., 1981), where the concept was defined as the organisational capacity to face threats. Later, from the 1980s to the 1990s, in a world characterised by industrial disasters, including Chernobyl, and the rise of technological innovations, the attention shifted to organisations and their reliability. In this context, resilience refers to the inclination to avoid disruptions and failures that could lead to catastrophe (Linnenluecke, 2017). The critical organisational capacity is thus evaluating organisational vulnerability to avoid potential risks while also developing a learning ability to be able to face risky, and

often unknown, events (Wildavsky, 1988). Resilience is therefore a process of awareness that determines the reliability of an organisation and is also supported by a capacity for improvisation, a common-sense attitude, and a respect of human resources and social relationships. After 11th September 2011, a new stream of research focusing on the resilience of human resources inside organisations emerged. This branch of the literature refers to humans' psychological capacity to cope with adversities and risks and recover after failures and conflicts, which includes a growing sense of responsibility (Luthans, 2002). Behind this approach, and in the context of human resources training, values such as optimism, hope, a sense of community, and resilience are fundamental. Organisational resilience is also the focus of several BMs. This approach examines the organisational processes that provide solutions to adversities and adjust to the environment through the analysis of factors that promote resilience. These latter are included in firms' inclination to constantly change and reconfigure their BMs to cope with the incessant and unexpected external circumstances. Among the factors that affect resilience, a broader information system, the loosening of control, and assigning financial resources to specific issues have been recognised (Vogus & Sutcliffe, 2003). Furthermore, innovation could also favour organisational resilience (Hamel & Valikangas, 2003). Recently the resilience topic has received attention in the context of the wine industry. For example, Duarte Alonso and Bressan (2015) found that factors to promote resilience in Italian micro and small wineries relate to strategies to increase marketing and sales (e.g. diversifying markets and increasing promotional activities). Golicic et al. (2017) conducted several interviews in the global wine supply chain and found that specific actions, such as innovating and experimenting, are needed to build resilience and contribute to firm sustainability. Despite the increasing interest in the topic, the factors that determine the resilience process in terms of resources and capabilities need to be subjected to additional research. Further, the relationship between resilience and sustainability remains an understudied question (Burnard & Bhamra, 2011). Recently, the literature has focused on understanding the relationships between organisational resilience, organisational variables, and organisational success. For example, Teixeira and Werther (2013) consider resilience as a driving factor that strengthens a firm's competitive advantage, concluding that an organisation is resilient when it is reactive, proactive and innovative in anticipating buyer preferences.

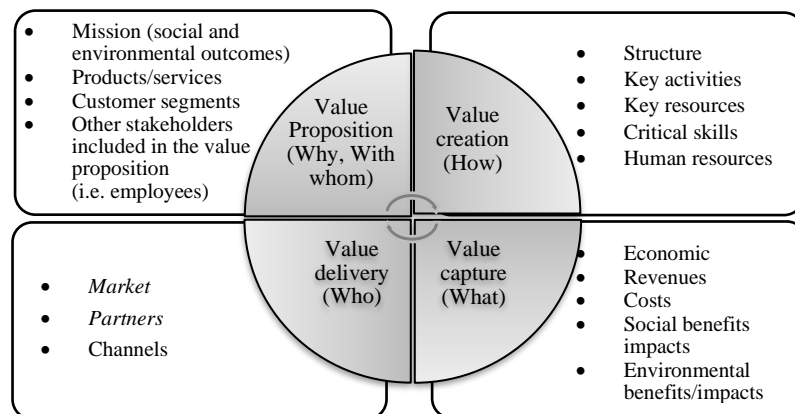
2.2 Sustainable business models

The integration of a broader perspective that includes not only an economic orientation but also social and environmental aspects also stands

out in response to the need for organisational resilience. This latter perspective arose from the external shocks caused by the 2008 global financial crisis (Lüdeke-Freund, 2010). As an extension of the studies on BMs, a new stream of research focused on sustainability has emerged, which embraces a broader set of stakeholders and pursues a balance between the economic, social, and environmental dimensions (Biloslavo et al., 2020.; Bocken et al., 2013). The BM refers to the strategic-structural setup of a firm, underlining the choices and processes made for value creation (Shafer et al., 2005). Many studies have defined the activities and processes through which a firm transforms inputs in its value proposition, attracts customers to purchase its products and services, and generates profits (Teece, 2010). In addition, further studies adopting a holistic approach have analysed the interconnections between the different components of a BM (Amit & Zott, 2010). Teece (2010) defined a BM as "the firm's organisational and financial architecture", outlining the key elements such as customers and their needs as well as revenues, costs and competitors. Osterwalder and Pigneur (2010) identified components such as value proposition (the products or services offered, the target customers, and the relationship with customers), activities, resources, partners, distribution channels, cost structure, and revenue structure. A different BM archetype, in which the components are more integrated, was proposed by Richardson (2008). This archetype includes value proposition (the offering and target customers), the value creation and distribution system, and the system of value capture. A further configuration, which is activity-based, recognise the activities carried out (what activities), their structure (how they are carried out), and the actors involved (who carries them out) (Amit & Zott, 2010). The current challenges emerging from the external context have led to the consideration of the BM as a broader construct (Lüdeke-Freund, 2010). The SBM adopts a triple approach – social, economic and environmental – that promotes the creation of greater value for more stakeholders, i.e. not only customers (Bocken et al., 2013). In this sense, a strategic and managerial approach that creates greater value could lead to a competitive advantage and better performance (Lüdeke-Freund, 2010). In this regard, recent studies have found that the integration of sustainability into the BM positively conditions the achievement of long-term superior performance in the context of airline transportation (Rotondo et al., 2019) and among SMEs in different sectors. Focusing on the wine sector, the dimension of sustainability in the BM is being increasingly appreciated. This is in response to the competitive needs related to the sector's growth as well as the agricultural nature of the activity, which requires a close link with the environment and the land. For example, some researchers have analysed changes in the customers' needs and

products, while other authors have explored vertical integration or outsourcing (Giraud & Giraud, 2014). A recent study has explored both the economic and sustainability performance of wine firms, also taking into account geographical characteristics and BMs. However, there is a need to cover some of the literature gaps and understand sustainability in the context of wine firms' BMs, which has thus far only been partially studied (Broccardo & Zicari, 2020). Integrating a sustainability perspective, as proposed by various studies (Geissdoerfer et al., 2018), as well as the various patterns of the BM shown above, this study applies the framework of a SBM based on four key components: value proposition, value creation, value delivery, and value capture. For each of the four elements, we identify the implemented activities, how these occur, and which actors are involved (see Figure 1). Value proposition refers to the product or service offered and to the target customer segments (mission, stakeholders, etc.).

Fig. 1- Conceptual framework – Sustainable business model



Value creation and value delivery, which represent the main categories of the model in Figure 1, deal with the firm's structure (i.e. its key resources and activities, human resources, and external elements such as partners, etc.). Finally, value capture refers to the measurement of the value generated by the firm's operations, and thus, refers to the final purpose of the firm that is coherent with its mission. In the SBM, in addition to the economic value (the firm's capacity to generate profits), the social and environmental benefits and advantages resulting from the firm's operations should also be measured and monitored (Lüdeke-Freund, 2010).

3 Methodology

This study adopted a qualitative research design using the case study method. The case study approach facilitates an in-depth investigation into a phenomenon in its real-life context to answer “how” or “why” questions about contemporary events (Neuman, 2014; Yin, 2018). This approach offers the possibility of understanding the company's propensity and mode to provide adequate solutions to adverse challenges due to changes in the external environment, e.g., against the backdrop of Covid-19. It also shows whether the firm's capacity for resilience is a consequence of its external environment or as is sometimes the case, whether it comes from inside the firm, i.e., stemming from its deepest soul (such as its mission or culture). In the last few decades, several socio-economic, environmental, and technological changes have posed challenges to firms, calling on them to implement new and different BMs. In this work, the focus is on the wine sector, an Italian area of excellence, with a strong push towards internationalization. It is also an agri-food sector, which has deep roots in the territory and is therefore traditionally associated with environmental issues. Wine firms are among those businesses calling for increased sustainability in BMs to create value for the firms themselves by preserving the environment and guaranteeing the well-being of future generations (Peattie & Belz, 2010). This study analyses Cantine Settesoli, a small-medium winery enterprise located in Sicily (Italy) with a strong orientation toward sustainability and social responsibility. The firm was chosen from a list of 95 Italian wineries, available on www.viticolturasostenibile.org, that have participated in VIVA projects¹. To select the SME for this study, the

¹ The national “VIVA Sustainability and Culture” project, which is the most important and comprehensive initiative for the wine sector in Italy, was initiated in 2011 by the Ministry of the Environment and of the Protection of the Territory and Sea. It aims to improve the sustainability performance of vineyards and wine production through the analysis of four indicators, namely Air, Water, Territory and Vineyard.

business size criteria from Recommendation 2003/361/EC were adopted and data on staff headcount, turnover and total assets were extracted from the Aida dataset. The first list was reduced to 33 firms due to the absence of data on Aida or because the firms did not meet the SME size criteria. The final choice was made based on the criterion of the highest performing winery to receive the “VIVA Sustainable Wine” certificate in 2020, i.e., the year of the first wave of the Covid-19 pandemic and the consequent social and economic crises. In a second step, data were collected through analysing documents available online. In addition, to obtain different viewpoints of the investigated phenomenon and how it is appreciated at each organisational level, the quality manager and public relations and communication manager were involved. Specifically, they were asked to answer questions about the company profile, types of products offered, types of clients, key activities, certifications, innovations, and sustainability and resilience propensity. The questions also explored whether sustainability was being fully integrated into the company’s BM and whether being sustainable was a consequence of the firm’s capacity to be resilient – or vice-versa. The interview was conducted via Google Meet and data were collected in May-September 2021.

4 Case study presentation: *Cantine Settesoli*

“A group of knowledgeable winegrowers with the courage to change, to invest, to plant and to wait”; this phrase, which is available on www.cantinesettesoli.it, immediately underlines the firm’s propensity for sustainability and resilience. Cantine Settesoli (hereafter, Settesoli) was founded in 1958 by 68 winegrowers in Menfi, a municipality in the Province of Agrigento, Sicily². At the time, planting vineyards in an area characterized by wheat, citrus and cotton fields was considered revolutionary. In 1974, the firm created a bottling plant and embarked on international sales. Establishing the bottling plant was the first innovative step in *Settesoli*’s strategy: It was among the first wineries in Sicily to shift from selling cask wine to bottled wine. In this way, the quality of the grapes and wines was improved, and the winegrowers were better paid for their

² *Settesoli* is a cooperative of 2,000 farmers. Beyond Menfi, *Settesoli* also has headquarters in Contrada Puccia, located less than one kilometre from Menfi, where top-quality grapes are used to make the top-of-the-line Mandrarossa wine, and in Santa Margherita di Belice, where grapes are cultivated in the high hills. Thirty-six different cultivars are cultivated on 6,000 ha of land (7% of the vineyard area on the island and the largest vineyard area in Sicily), and the wines are distributed in Italy and overseas through the Settesoli, Mandrarossa and Inycon brands.

efforts. The right remuneration for partners is one of the main points of the firm's mission. Another key point of *Settesoli*'s mission is constant research to enhance quality, which is inextricably linked to the continuance of the firm. It emerged from the interviews that sustainability is incorporated in the company's BM and is reflected in the production process, with special consideration for the social aspects. Indeed, *Settesoli* believes in three fundamental and shared values: 1) Sicily (the land in which they are born and work³); 2) community (sustainability goes beyond economic goals); 3) quality (to guarantee high-quality grapes, income for the partners, and excellent wines for the consumers). In turn, the sustainability values are founded on two main cornerstones: 1) innovation to pursue excellence and be "always be ready for everyday challenges, that means being resilient"; 2) ongoing and targeted research and development (R&D) initiatives from the land and the soil to the bottling to achieve intellectual and human skills and obtain the maximum qualitative productivity. Additionally, *Settesoli* actively pursues a change in the cultivation mindset to shift attention from the quantity to the quality of its wine, in line with the environmental and social goals. Combined, innovation and R&D enable a higher quality and a broader selection of wines for different targets in terms of consumer needs, distribution channels, etc. Thus, the used methods and people's engagement (e.g., employees, families etc.) make a difference in achieving the company's in terms of its quality and environmental aims. In this sense, sustainability is one of the pillars of the firm's mission, allowing it to embrace its environmental and social responsibilities. The focus on sustainability is reflected in each phase of the supply chain. Indeed, thanks to the firm's careful management of its production cycle, chemical treatments are limited. In addition, the use of organic grapes is increasing, as certified by *Ecograppo Italia*. In the winery, technologically advanced machinery reduces waste and emissions by enhancing efficiency. Packaging is eco-friendly: bottles consist of more than 60% recycled glass and Forest Stewardship Council certified suppliers are preferred. Solar panels (about 6.700 sqm) provide 10% of the yearly energy needs, and a purification plant produces 89% of the clean water and the 2% of mud needed for fertilizing the vineyards. In addition, the firm recently started a project aimed at transforming the by-products (e.g., pomaces, stalks). The project should lead to several wineries forming a consortium to create high-quality fertilizers to replenish burdened lands, guarantee quality and cut costs. Each step of the production chain is tracked and certified (*Settesoli* was the first

³ For example, *Settesoli* established the first wine fundraising project through the sale of bottle of wine in Sicily to support *Selinunte*, the largest archaeological park in Europe (source: <https://settesolisostieneselinunte.it/it/il-progetto/>).

winery in Italy to trace its entire production chain). Some certifications are mandatory for winemaking⁴⁵, while others are more voluntary-based⁶. In particular, voluntary-based certifications are the result of avant-garde top management that puts extraordinary effort into sustainability. Thus, particularly in *Settesoli*, sustainability is reflected in the organizational structure, and the top management plays a pivotal role in sustainable development (98% of the resources are from Sicily, partners' income has increased by 40%/ha over the past four years, certifications guarantee the quality of products and information transparency, etc.). As stated by the quality manager, not having avant-garde top management would lead to the loss of the firm's certifications (and their advantages) within a few years. Meanwhile, *Settesoli* certifications are increasing every year, guaranteeing accurate and integrated management, greater efficiency, and the consolidation of its relationships with its stakeholders. Furthermore, being sustainable "helps the firm, in case of a loss of a market, to find other consumers immediately [...] this means to be resilient". Being resilient also means analysing competitors and the market in general to improve and reach goals; hereby, the information gained thanks to the certifications is essential. The sustainable soul of *Settesoli* – which permeates its resilience – also emerged during the Covid-19 pandemic. While it was impossible for farms to fully cease their activities due to their primary function, the situation changed, even for companies in this sector. For example, events represent an important showcase for wineries to present their products, yet these had to be cancelled during the pandemic. However, at *Settesoli* a process of reaction and adaption started, "difficulties have been turned into opportunities", and all programmed events were held via other means. In March 2020, the first online tasting was launched to present Wine from Etna (*Vini dell'Etna Mandrarossa*). Furthermore, in April 2020, unsold wine was used to pay for an advertisement at the national level: "In this way, our visibility has been enhanced, and our partners' income was safeguarded because unsold wine has not been depreciated". Additionally, the firm strengthened its e-commerce to ensure national and international deliveries and enhanced its presence on social networks. In 2021, the company proposed that all the previous innovative solutions be implemented again to pursue resilience and enhance sustainability. Resilience and sustainability also mean involving competitors to work "as a team". For example, since

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⁵ E.g., ISO 9001 for the quality system, ISO 14001 for the environment, and British Retailer Consortium (BRC) or International Food Standard (IFS) certifications for entry into specific markets

⁶ Such as ISO 50001 for energy management, VIVA or *SOSStain Sicilia*.

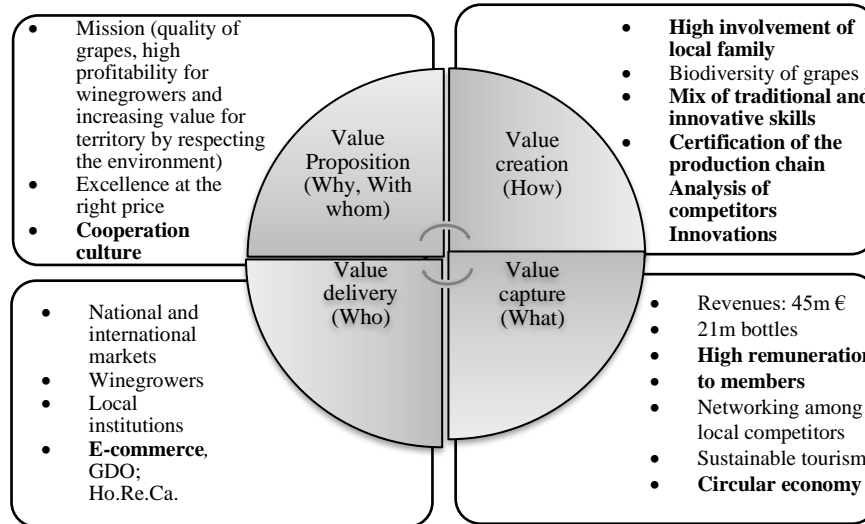
2019, the public relations and communication manager has been a delegate at Sicily's "Women of Wine" (*Donne del vino*): "I oversee a group of the potential of *Settesoli* competitors. However, with them, it is possible to promote Sicily and its territory, a key factor for our core business. I have this vocation thanks to *Settesoli* and the work I do every day for this company".

5 Conclusions

The results show that sustainability represents a strategic positioning for *Settesoli*. Specifically, it is directed at improving the quality of the grapes to obtain a competitive advantage and ensure better profitability for the winegrowers and a higher engagement with the local community (70% of the families living in this part of southwestern Sicily are involved in the firm's activities). Thus, corporate social responsibility is incorporated into the company's strategies and policies, and *Settesoli*'s sustainability is present in the four key components of its BM (Figure 2). In the value proposition, sustainability permeates the supply chain (e.g. through the reduction of chemical treatments for grapevines and waste in the winery), and each step of the production chain is certified. Consequently, sustainability is also incorporated in value creation and value delivery thanks to the substantial involvement of the local community, the younger generation, and consumers (from Italy and overseas) who are more interested in quality, the environment, and organic products (15% of the total surface of vineyards is organically farmed, and this is continuing to increase). Finally, considering value capture, it is possible to highlight the positive effects of the sustainable decisions made by *Settesoli*. In the previous year, its revenue was about 45 million euros from 2 million bottles produced. This has resulted in higher remuneration being paid to members. From the social viewpoint, it is possible to underline several points: the strong involvement of employees who believe in the value of the community; the quality of the wines that they produce; the economic, social, and environmental aspects of well-being; the strong cooperation between local competitors and the promotion of local and sustainable tourism. Referring to resilience, it is possible to find some resilient aspects in *Settesoli*'s SBM (in bold in Figure 2). Indeed, throughout its history *Settesoli* has initiated several processes aimed at reacting to and adapting to changes to ensure the company's survival. First, *Settesoli* pays close attention to innovation by investing in technology and by mixing traditional and recently imported varieties and cultivars. Secondly, the analysis of its competitors is a key point for understanding where the firm is and where it

would like to be. Also, the certification of the production chain and the engagement of the local community foster resilience.

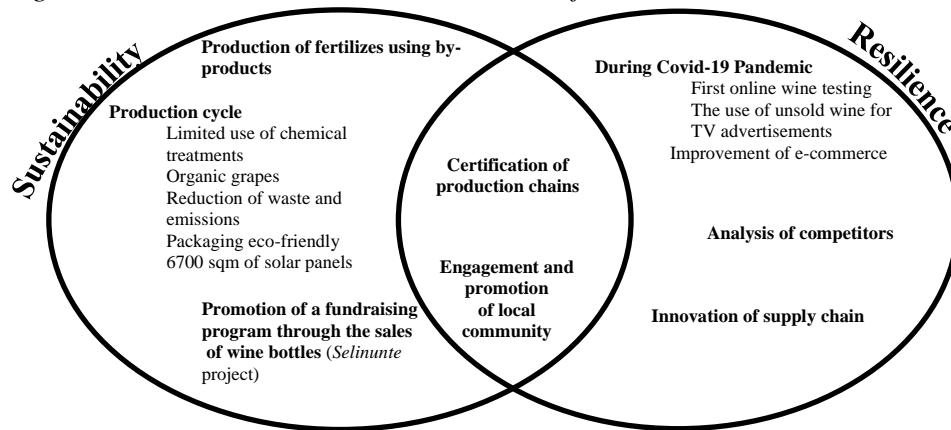
Figure 2. Sustainable Business model *Settesoli*



Indeed, its certifications have helped the company to face crises in the markets, while safeguarding the territory guarantees the continuity of the firm and enables it to achieve its first corporate aim, i.e., survive over time. The resilient soul of *Settesoli* also emerged during the Covid-19 pandemic. During these two difficult years, the company strengthened its social mission by creating a circular economy (using unsold wine to pay for marketing activities) and enhancing its e-commerce channels. The company has decided that these initiatives will continue in the future because they were (and will be) able to guarantee proper remuneration for the winegrowers. Based on the case analysis, it appears that the notions of sustainability and resilience influence each other and are part of a long-term investment. As its primary purpose, resilience tends to be oriented towards effectiveness since it is aimed at tackling risks, unforeseen events, and any likelihood of discontinuity to ensure the long-term survival of the firm. Meanwhile, sustainability is a dimension more linked to efficiency since it is oriented towards the rationalization of resources so as not to compromise future growth. These conceptualizations allow us to frame sustainability and resilience as two sides of the same coin in that they emphasize, under different conditions, continuity: resilience, by responding to stresses and facing adverse contingencies, ensures the survival of the company; sustainability, in line with its consolidated definition, safeguards the environmental context to guarantee the needs of future generations. When

the social dimension of sustainability is emphasized, there seems to be a greater propensity for resilience in that it strengthens the identity of the company and highlights its contribution to the geographical area in which it operates. In the exploratory case examined here, this mix between sustainability and resilience is found in the value proposition aimed at customers through the offer of quality products and the use of certified operational processes that guarantee respect for the environment and people, while also focusing on the land (Figure 3). *Settesoli* pays great attention to the local population, which is historically linked to the company, as well as to the adequate remuneration of its winegrowers and the respect and consolidation of local culture and traditions. The examined case presents a company that perfectly combines tradition with innovation. Due to its agricultural vocation, it represents an entity that finds strength in its continuity and success within its land. In this close link with its land, *Settesoli* sources its distinctive competencies: a qualified workforce, the enhancement of agricultural and cultural traditions, the protection of the landscape from unsustainable tourism, and the involvement and commitment of all winegrowers, regardless of their size and social background. All the previous elements can be ascribed to social sustainability and, at the same time, are the key elements of resilience. Therefore, answering the first question – concerning the relationship between resilience and sustainability – it is possible to assert that in *Settesoli* exists a conceptual distinction and an overlap between these two notions as there is a will to enhance both the value proposition and the firm's identity. In other words, sustainability, and resilience blend to form a sort of “sustainable resilience” and “resilient sustainability” (Marchese et al., 2018). Considering *Settesoli*'s BM, sustainability is linked to the production cycle to maximize and safeguard resources (efficiency) for future generations. In addition, its innovations aim to guarantee the development and continuity of the firm over time, even during adverse periods, as in the case of the Covid-19 pandemic. At the same time, *Settesoli*'s positioning choice shows actions that foster resilience based on sustainability (sustainable resilience) and vice-versa (resilient sustainability). Among the first group of actions, it is possible to mention mandatory and voluntary certifications to aim the value proposition at specific target markets and consumers. Indeed, a well-structured certification system allows the firm to look towards other markets to establish new relationships immediately.

Figure 3. Sustainable and resilient actions of *Settesoli*



Moving towards the other group of actions (resilient sustainability), a critical role is played by the firm engaging and promoting with the land. Indeed, the strong connection between families and *Settesoli* fosters the social and economic development of the geographical area and the networking between stakeholders (i.e., sustainable tourism) by safeguarding the environment and traditions. Being sustainable in terms of the land helps *Settesoli* to address environmental complexity and transformation, both the positive and negative aspects, and better safeguard the socio-cultural and environmental dynamics. As with every empirical analysis, although it aims to fill the gap in the literature on the relationship between resilience and sustainability, this work has some limitations attributable to the methodological choice. While the use of a single case has made it possible to explore the relationship between sustainability and resilience, it is deeply conditioned by the peculiarities of the case firm. Thus, to obtain more generalizable results, a multi-case study and a subsequent multi-case comparative analysis would be helpful, also to strengthen the framework developed in the present study.

This study represents the first milestone to address the relationship between sustainability and resilience – today, more than ever (in the light of the PNRR in Italy, for example), this is a current issue that needs further investigation.

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Do sustainability and food safety stimulate innovation among agri-food entrepreneurs? The experience of Italian innovative startups during the Covid-19 pandemic

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Paper type – Long abstract

1. Objectives

The agri-food industry has traditionally been considered as conservative, mature and with low level of innovation (Costa and Jongen, 2006; Sarkar and Costa, 2008; Klimczuk-Kochańska, 2018; Triguero et al., 2018). Especially micro and small enterprises, which represent the majority of agri-food companies worldwide, Italy included, are not innovation-oriented, mainly because of the lack of internal and external resources, i.e. qualified staff, R&D activities, collaboration, information sources and public financing (De Martino, Magnotti, 2018). Nevertheless, global trends for the future of the agri-food system – such as sustainability, climate change, food safety and health, etc. – pose a major challenge and force companies to make major transformations (European Parliament, 2019). These trends have been

exacerbated by the pandemic that has been affecting the entire food system and, in the FAO's words "has laid bare its fragility" (FAO, 2020⁷).

In this context, innovative startups, i.e., newly-created, innovation-based enterprises, have come into the spotlight as a key driver of innovation. They are deemed a great chance to increase the innovativeness of agri-food system (Biancalani et al., 2021; Graziano, 2020). However, the purpose of innovation and startupper's motivations to introduce innovations in this sector have not yet been investigated. In particular, it is unknown whether agri-food startupper pursue typical business goals – cost reduction, product improvement/differentiation, etc. – or goals aligned with the megatrends characterising the evolution of the agri-food system at the global level. Moreover, it would be interesting to investigate whether and how Covid-19 has contributed to speeding up or slowing down the startups' innovation processes.

To fill this gap, this research explores new entrepreneurial initiatives in the agri-food industry, in order to understand how and why food safety, health, environmental and social sustainability issues are really incorporated into business models. Specifically, we aim to answer the following RQs:

- (1) What objectives guide innovation in agri-food industry?
- (2) Which are startupper's motivations behind innovation in agri-food industry?
- (3) How has the pandemic impacted on the startups innovation?

2. Literature review

Innovation includes all activities enabling the firm to conceive, develop, produce and introduce new products, services, processes, or business models (Freeman, 1976).

Within studies about the agri-food industry, innovation is considered the result of R&D activities and market orientation (Grunert et al., 1997; Avermaete et al., 2004), company size, age of the firm and regional economic performance (Avermaete et al., 2003), qualified staff, partners and sources of information (Avermaete et al., 2004), collaboration along the supply chain (Kühne et al., 2010), internal and external resources (Capitanio et al., 2010; De Martino and Magnotti, 2018), and public policies (Acosta et al., 2015). Innovations introduced by agri-food firms are very often incremental (Zouaghi and Sánchez, 2016), mainly conservative (Costa and Jongen, 2006; Sarkar and Costa, 2008) and traditionally focused on the minimization of production costs (Galati et al., 2016) or the improvement

⁷ <https://www.fao.org/news/story/pt/item/1313598/icode/>

of quality because of the great attention of consumers to product quality and food safety (Corallo et al., 2020).

Recently, a new sensitivity towards other issues is emerging. Some research pointed out that – at the firm level – organisational moral motives to act in society in accordance with ethical norms are crucial in product innovation processes of food firms when aiming for socially responsible outcomes (Garst et al., 2017). Moreover, sustainability can trigger eco-innovation in the agri-food industry (Rabadán et al., 2019) and business model innovation for circular economy practices, allowing the firm to combine high financial performance and social and environmental objectives (Bigliardi and Filippelli, 2022). Finally, across the world, the COVID-19 pandemic is compromising agri-food firms' ability to continue business as usual (FAO, 2020⁸) and innovation could be crucial to their survival.

Prior studies have produced significant knowledge on innovation in the agri-food sector. However, they focused mainly on the firm level and considered established enterprises by analysing characteristics of the business and/or the context that can foster innovation. However, when we shift the focus to start-ups and the individual level of start uppers, little is known about the purpose of innovation and the entrepreneur's motivations behind innovation.

3. Approach/Method

A qualitative approach based on a multiple case study (Eisenhardt and Graebner, 2007; Miles et al., 2014) was carried out and purposeful sampling was employed (Patton, 2002). The empirical analysis is conducted in Italy, where the agri-food industry represents a strategic sector for the national and European economy (Crea, 2020).

According to our research aims, we selected a sample of innovative startups within the agri-food industry from AIDA, the Bureau van Dijk database, which includes a specific section for innovative start-ups. According to the Italian Law Number 221/2012, innovative startups must meet at least one of the following three requirements: (1) investments in R&D activities; (2) hiring experienced researchers; (3) holding a patent.

Semi-structured and in-depth interviews with start uppers are our primary data source. Interviews took place online, ranged from one to two hours, and were conducted by the authors. Respondents are invited to introduce themselves and talk about their startups and their innovation

⁸ <https://www.fao.org/news/story/pt/item/1313598/icode/>

processes. Specifically, main attention is devoted to the most innovative aspect of their startup and which their objectives and personal motivations are.

At the moment, eight start uppers have been interviewed but data collection is still ongoing. We intend to carry out other interviews to reach a satisfactory level of ‘theoretical saturation’ (Eisenhardt, 1989).

Data analysis is organized into two main steps (Eisenhardt and Graebner, 2007; Miles et al., 2014): a) within-case analysis and b) cross-case analysis.

4. Results/Findings

As the data collection is still ongoing, the results must be considered very preliminary. Regarding the first research question, innovation in agri-food startups is mainly guided by objectives such as ensuring more excellent food safety of products, better food and beverage organoleptic quality and a more environmentally sustainable production process. Behind these objectives, and referring to the second research question, motivations of startupper are very different. They are often far from traditional profit reasons and strongly linked to startupper’s personal values and beliefs. Some startupper are intimately and deeply convinced of the importance of protecting the environment, sustainability and health. In this vein, for some startupper, innovation is driven by the desire to leave a healthier environment for their children or educate the consumer on healthier and more sustainable food. Others are inspired by the desire to reinterpret in an innovative way traditional products or production processes linked to their childhood, their family or the context in which they grew up. Finally, some startupper are driven by the desire to ensure food safety beyond what is required by food legislation. In these cases, startupper introduce innovation to improve food safety because they consider this aspect an ethical responsibility of their entrepreneurial actions in the agri-food sector.

Starting from these preliminary results, we aim to identify and describe some recurrent profiles of agri-food startupper, in order to account for the variety of goals and motivations that drive innovation processes in the agri-food industry. Regarding the third research question, our results show that the interviewed startupper perceive that consumers are increasingly aware of the need to eat healthy and sustainable food and more and more concerned with sustainability and food safety. This increasing consumer awareness strengthens startupper’s motivation and encourages them to proceed in the direction of their innovation process.

5. Value & Implications

Studying objectives that guide innovation and startupper's motivations behind innovation in agri-food industry is relevant to understand whether and how newly-created and innovation-based enterprises are sensitive to global trends for the future of the agri-food system and ready to take up the challenge of change.

This study highlights that even in such a traditional sector as agri-food industry, a new entrepreneurial figure is emerging, driven by a different sensitivity to sustainability, environment, health, food security, etc. The study is also valuable for enabling policymakers to identify the levers on which to promote an entrepreneurial culture more oriented towards the megatrends that are characterising the agri-food industry.

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Innovative SMEs' circular economy practices amidst the COVID-19 crisis: A policy incentives focus

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Keywords – Circular economy, innovative SMEs, Sustainability, COVID-19-related incentives, Resource-based view

Paper type – Long Abstract

1. Objectives

Specific interventions enabling innovative SMEs to access finance during crisis are of extreme relevance for their survival. Governments' incentives related to SMEs during the pandemic have generally focused on grants, deferral of tax and debt payments, and the extension or simplification of the provision of loan guarantees to enable SMEs accessing credit (OECD,

2020). At the European level, policy response to crisis is routed towards the establishment of a Recovery plan for the years 2021-2027 that will prioritize specific funds for the transition to a green climate-neutral economy. Regarding the SMEs' context, the transition toward sustainability has also been widely recommended by European Institutions due to their relevant environmental impact (Bontoux and Bengtsson, 2015). Thus, COVID-19 pandemic could represent an opportunity for SMEs to innovate their strategy around sustainability and survive the crisis (Pencarelli et al., 2020; Ibn-Mohammed et al., 2021; Prieto-Sandoval et al., 2021). To the actual state of the art, the role of public policies to provide financial supports to sustainability innovation in time of COVID-19 crisis is under-investigated, especially when focusing on innovative SMEs. Based on this premise, and considering the Italian context, this study aims at analyzing how COVID-19-related incentives issued through the Law 77/2020 (Recovery Decree) focused to innovative SMEs have supported circular economy (CE) as sustainability-oriented innovations.

2. Literature review

Steaming from Penrose (1959), Lim et al. (2020) argue that a firm can be considered as a bundle of strategic, physical, financial, human, and organizational resources which are interconnected and co-evolve allowing the firm to grow. During the pandemic, SMEs' entrepreneurs are required to assess the state of things of their businesses, regain the balance within their firms' resource systems, identify and exploit new business opportunities. Lim et al. (2020) also argue that the role of governmental incentives in time of crisis are essential to allow SMEs not only to survive but also to start growing again thanks to investments oriented to support the resources' bundle. Regarding CE, the availability of public funds has been showed to bolster environmental innovations, eco-innovation and ultimately, CE innovations (Scarpellini et al.; 2018; Aranda-Usón et al. 2019; Cecere et.al, 2020; Ghisetti and Montresor, 2020). The extent to what CE innovation is supported by ad hoc strategies, competences and resources' bundle has been object of recent research. For instance, Dey et al. (2020) categorized CE strategies in the following five field of actions: Take, Make, Distribute, Use and Recover. To justify why firms implement CE strategies, the resource-based view of the firm' theory has been used emphasizing the role of physical and organizational resources as well as of competences as enablers of CE. Studies such as the ones of Prieto-Sandoval et al. (2019), Dey et al. (2020) and de Arroyabe et al. (2021) have determined which resources and competences are needed to support CE

strategies in different fields of action. The current paper adopts the above-mentioned approach to investigate the role of COVID-19-related incentives released to innovative SMEs in supporting CE resources, competences, and CE strategies during the pandemic.

2. Method

A survey was administered online in the time span September-November 2020 using Qualtrics package, to the population of Italian innovative SMEs operating in the manufacturing field. 99 questionnaires were returned, for an overall response rate of 23.91%. Strategies, competences, and resources were identified based on the five field of actions presented by the literature. Firms were asked the extent to what they adopt CE strategies and develop resources and competences in each field of action; the answers were organized, based on a 7-points Likert scale (1 = “not at all”; 7 = “completely”). Firms were also investigated with regard at the adoption of incentives connected to the emergency period and defined by the Recovery Decree. Therefore, respondents were asked to disclose whether they received the different types of COVID-19-related incentives, namely the “Venture Capital Support Fund” (VCSF), the refinancing of the relief granted in the form of soft loans (RGSL), the provision of relief granted on capital injections (RGCI) that may support investments. We tested the effects of such incentives on CE strategies, competences, and resources through one-way analyses of variance (ANOVA).

3. Findings

Of the studied sample, 43 firms (43.43%) were granted with COVID-19-related incentives introduced to support innovative SMEs during the pandemic. The analysis reported significant differences between those that received the incentives and those that did not for CE strategies, competences, and resources (for all the three variables $p = .000$, 2-tailed test). More in depth, firms that did not accessed the incentives reported lower levels of CE strategies, competences, and resources. Further analysis was undertaken focusing on the number of such incentives. In fact, of the 43 firms that received incentives, 32 firms (74.42%) were supported with one incentive; the remaining 12 (25.58%) firms with two different types of incentives. Therefore, the significance of the differences emerging within the tree groups (0, 1 or 2 incentives) was tested. Firms that did not receive COVID-19-related incentives presented significantly different values concerning CE strategies, competences, and resources than those who

received one incentive or two incentives. Non-significant differences resulted between the second and the third groups. It emerges that benefiting from incentives, rather than their number, influences the development of CE strategies, resources, and competences. Thus, additional analyses explored whether different incentives have different effects. In the sample, 32 firms received RGSL incentives, 18 RGCI incentives and four VCSF incentives. Analyses were performed to assess the separate effects of VCSF, RGSL, or RGCI incentives compared to those firms that received the other types of COVID-19-related incentives. Only those firms granted for the RGLS incentives resulted to differ significantly from the others, although limited to CE strategies, presenting lower levels than those who did not receive such type of incentives ($p = .041$, 2-tailed test). Non-significant differences were detected in the other cases.

Value & implications: This study is one of the first attempts to emphasize the role of governmental COVID-19-related policies on incentives in enhancing CE strategies of innovative SMEs during the pandemic. The results show that innovative SMEs that benefited from dedicated COVID-19-related incentives have implemented more CE strategies and present greater CE competences and resources than those that have not benefited from such measures, highlighting that governmental support can allow firms to invest in the development of internal assets needed to capture new business opportunities. As mixed results are found in literature with reference to the role of venture capital in supporting CE innovation, more research is needed to investigate how such incentive can promote SMEs' innovation around CE in time of crisis. Although there is no significant difference in terms of resources and competences according to the type of incentives, the access to capital injections may have allowed better innovation. Thus, it emerges that, given the governmental incentives, it is how a firm create synergies among the available assets that makes the difference in terms of CE strategies' implementation. In this regard, the paper adds knowledge on the role of resources and competences supporting the adoption of CE strategies in time of crisis.

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Marketing and Strategies

The Role of Serial Crowdfunding in Startup Firms' Innovative Activities

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Abstract

Crowdfunding (CF) has attracted increasing attention from researchers and many studies have been conducted in order to shed light over a variety of aspects of the phenomenon, especially when a start-up is involved in.

Recently, CF has been investigated also in the light of the “seriality” of CF campaigns, i.e. the participation to more than one campaign by the startup. The existing studies in this stream of research, focus mainly on how “serial CF” affects the management of the subsequent campaigns and their performance, thus adopting a merely “tactical” perspective on the phenomenon. More importantly, there is a lack of in-depth studies over the actual processes characterizing serial CF and its role in innovation strategies and practices.

Consistently with the above mentioned gaps in literature, the main goal of this paper is thus to analyze more in depth the role of serial CF in innovation strategies adopted by start-up firms, shedding light on the micro-processes involved, in line with the recent call for exploring the “non-financial” dimension of CF.

To this aim the paper adopts a qualitative methodology based on an exploratory case-study of a company actively exploiting multiple CF campaigns mostly as opportunities for innovation. The case offers insights over the role of serial CF in innovation processes,

as it shows a company deliberately participating to these initiatives with the goal of developing new products and generating innovative ideas through the systematic collaboration with committed early adopters.

Keywords – startup, serial crowdfunding, innovation, business networks

Paper type – Academic Research Paper

1 Introduction

Crowdfunding (hereafter CF) platforms represent a new source of resources to support either business or not-for-profit entrepreneurial projects. CF has received increasing attention by scholars, attempting to explore its main features and processes (Block et al., 2018; Brown et al., 2018; Raab et al., 2020). CF is no longer framed only as a tool for access to financial resources for specific needs, as it is also conceived as a new way to enter the market and compete (Lehner et al., 2015) and to gain access to a variety of resources (Pollack et al., 2019), thus allowing firms to pursue innovative solutions (Hervè and Schwienbacher, 2018).

In parallel, the literature on “serial CF” is gaining growing attention by scholars (Butticè et al., 2017). The few existing studies focus mainly on how serial CF affects the management of the subsequent campaigns and their performance (Sewaid et al., 2021), thus adopting a merely tactical perspective on the phenomenon. More importantly, there is a lack of in-depth studies over the actual processes characterizing serial CF and its role in innovation strategies and practices.

Therefore the main goal of this paper is to analyze more in depth the role of serial CF in innovation strategies adopted by start-up firms, shedding light on the micro-processes involved, in line with the recent call for exploring the “non-financial” dimension of CF (Nielsen, 2018; Hervè and Schwienbacher, 2018, Pollack et al., 2019).

Notably, this paper aims at answering the following research questions (RQ):

- Which is the role of serial CF in innovation processes implemented by startup firms?
- How do startup firms manage innovation processes emerging from serial CF?

To answer these questions the paper adopts a qualitative methodology based on an exploratory case-study of a company actively exploiting multiple CF campaigns mostly as “opportunities” for innovation. The use of a qualitative approach is in line with the call of Elridge et al. (2021) viewing companies “*as living organisms*” and arguing that “*it is not possible to capture all intrinsic characteristics of crowdfunding and its role in financing SME growth through a purely quantitative approach*”. The analysis of the case-study is pursued through the lenses of the IMP approach and of the ARA model (Håkansson and Snehota, 1995), as it provides a useful framework to examine the evolution of networks while placing attention on the underlying processes involving different actors, multiple activities, and development and combination of relevant resources. This approach is in line with the call by Nielsen (2018) “*to adapt their research approach and to look beyond the single actors (platform, campaigns, and crowdfunders) of the process and instead seek to empirically observe how the overall crowdfunding process is maintained*”. It also answers to Manning (2018), placing emphasis on “*the actual process of reaching out to different ecosystems, to better capture how resource-bundling and market-building happens over time and what role various platforms and ecosystems play in this process*”.

The remainder of the paper is structured as follows. Section two addresses the literature background; after an exploration of the research on the serial CF phenomenon, the IMP studies on startups and the role of relationships and networks is discussed, with a specific attention to the networks of actors, activities and resources (ARA). In the third section some methodological notes about the single case study development are addressed. Section four is devoted to the case analysis. The following section discusses the main results of the study. Finally, the main contributions of the study under a theoretical and managerial perspective and the future research developments will be outlined.

2 Literature review

2.1 Serial CF

In recent years CF has received great attention in the field of management studies (Belleflamme et al., 2014; Brown et al., 2019; Chaney, 2019; Lagazio and Querci, 2018; Mollick, 2014). It can be defined as “*an open call for the provision of financial resources, either in the form of donations or in exchange for non-financial rewards or financial gains to support specific initiatives*” (Fortezza et al., 2021).

It is widely known that CF can take many different forms, in the light of the objectives set up by the promoting organization and of the features of the chosen platform and related CF scheme. The two more widely used CF schemes are the equity crowdfunding (hereafter ECF) and non-equity crowdfunding (hereafter NECF); the former is characterized by the access to a capital share by backers/funders leading to an entrepreneur-investor relationships, while the latter is concerned with various kinds of rewards for those providing financial support.

Existing literature on CF highlights its strong relational dimension (Brown et al., 2018; Brown et al., 2019; Nielsen, 2018). Participating in CF campaigns implies on the one hand activating relationships with partner organizations and firms, such as CF platforms, consultants and suppliers of tangible products and services (Fortezza et al., 2021), on the other hand starting the interaction with the world of backers, which includes actors – individuals, organizations, firms – already part of the existing proponents’ networks and newly contacted through the launch of the CF campaigns (Butticè and Noona, 2020). The networked nature of CF campaigns has been explored with regard to the role of social capital, as it effectively shapes their evolution and performance. A key distinction has been made between “internal social capital” – related to backers participating to the campaign – and “external social capital” concerning the networks surrounding the CF proponent (Eiteneyer et al., 2019). CF campaigns are able to connect – and are shaped by – multiple contexts and local ecosystems (Manning, 2018). Overall, CF campaigns are characterized by strong complexity: *“the crowdfunding process appears to inhabit multiple organizational molds simultaneously network, community, market, and organization, each of which explains aspects of the crowdfunding process but fails to explain it in its entirety”* (Nielsen, 2018). CF complexity implies also organizational hurdles, which might represent key barriers for effectively implementing this type of projects (Di Pietro et al., 2021).

In the light of its nature and features, CF has become a key tool for accessing also non-financial resources to implement innovative projects. CF can provide useful technical and market knowledge, which can be used for upgrading products and services and for tapping into new markets (Nielsen, 2018; Hervè and Schwienbacher, 2018, Pollack et al., 2019). Even though various studies emphasize the benefits offered by CF, its actual impact on innovation is strongly debated. While Troise and colleagues (2021) and Wachs and Vedres (2021) find a positive effect of CF on the innovation enhancement, Eldridge (et al., 2021) instead, provide evidence of a positive impact on SMEs’ growth, but not on their innovation performance. However, various scholars highlight the need of more in-depth research over

the actual innovation-related interaction processes between CF actors (Hervè and Schwienbacher, 2018), placing emphasis on the role of “active backers” (Butticè, 2020).

Opportunities offered by CF have fostered the development of serial CF, which could be defined as “*the participation in more than one CF campaign*” (Fortezza et al., 2021). Serial CF is a relevant phenomenon attracting increasing interest by various scholars engaged in research on CF (Bessièrè et al., 2019; Efrat et al., 2021; Lehner et al., 2015; Noonan et al., 2020; Onochie Fan-Osuala, 2021). Existing studies have been mainly concerned on the performance of campaigns and on the main factors – such as social capital and learning – shaping it (Butticè et al., 2017; Lee and Chiravuri, 2019; Skirnevskiy et al., 2017; Stanko and Henard, 2016): achieving CF targets in subsequent campaigns is positively impacted by building on consolidating social networks emerging in the first CF campaigns and by learning generated through the initial experience in CF. Limited emphasis – instead – has been placed on the actual serial CF processes and specifically on the motivations, behavior and practices of serial CF proponents. An exception is the study by Efrat and colleagues (2021) shedding light on the “emotional” side of CF and the role of passion and achievement in pushing entrepreneurs to undertake subsequent campaigns. Notably, the connection between serial CF and the underlying innovative processes have not received yet adequate attention in the management literature.

To better explore serial CF as an innovation strategy we argue that the Business Network perspective – as outlined in the Industrial Marketing and Purchasing Group – provides a useful framework, as it places strong emphasis on the evolution of business networks – a key feature of CF and serial CF – and on interaction processes among actors leading to the emergence of new activities and the development of new resources. This perspective will be discussed in more depth in the following paragraph.

2.1 Startup development in IMP studies

IMP-related studies dealing with startups and entrepreneurship have known a huge development in the last years (Aaboen et al., 2017; Baraldi et al., 2019). Notably, Business Network approach has been applied in order to understand the main role played by interaction and relationships in affecting the evolution of the start-ups. Contributions on this theme rely on the main IMP concepts - interaction, business relationships, networks - and on the main frameworks - Actors-Activities-Resources (ARA) model and resource interaction framework (Bocconcelli et al., 2020; Håkansson et al.,

2009), in order to shed light on the evolution of the start-up from its foundation (and even before) and throughout its development.

The starting point of these analyses is the recognition that startups are not in a *vacuum* (Snehota, 2011), instead they emerge and develop within complex sets of actors, activities and resources. New businesses are engaged in "assembly of resources" with the involvement of partners, customers and suppliers (Ciabuschi et al., 2012). Various studies focus on the role and impact of networks and notably of initial relationships in the path undertaken by start-up firms to become a new node (Gadde et al., 2012; Havenvid and La Rocca, 2017; La Rocca et al., 2013). Start-ups might be engaged in interaction with a variety of business networks, which might be related to different development, production and user settings (Landqvist and Lind, 2019) and also with communities - sharing interest or passions - thus simultaneously dealing with both business and social networks, which could be characterized by both overlapping and distinct culture and values (Brown et al., 2018; Pagano et al., 2018). Overall startups - in the light of their limited availability of resources and liability of newness (Guercini and Milanesi, 2019; Baraldi et al., 2019) - might face difficulties while being engaged in complex activities involving high degree of innovation - i.e. new product development, market analysis, commercialization. Therefore startups in the early stages deal with uncertainty and ambiguity in terms of product development and overall offering, potential customers, and organisational configuration (Ciabuschi et al., 2012; La Rocca et al., 2013).

The "control" of key resources, the development of core activities as well as the exploitation of previous business relationships with different actors could allow start-up firms to implement interactions on a more equal footing (Petrucci, 2018) and thus facilitate the process of "strategizing" in a network context (Laari-Salmela et al., 2015). Effective strategizing is shaped by the construction of a network identity able to attract customers, suppliers and supporting organizations (La Rocca et al., 2019; Laari-Salmela et al., 2019). All this could lead to three distinct processes of start-up firms' network embedding: establishment, consolidation and stabilization (Baraldi et al., 2019).

In the context of startups IMP studies have been only marginally concerned with the financial aspect (Strömsten and Waluszewski, 2012). More precisely, IMP studies have questioned the traditional approach that considers the process of start-ups financing as isolated and linear and emphasize its interconnectedness with other relevant processes of start-ups development. IMP concepts has been recently adopted in the study of the role of networks in CF activities. Brown et al. (2019) argue that CF is much more than money when a network perspective is taken over such processes.

In particular, they show “*the important role that different types of networks – interpersonal and inter-organisational networks, strong and weak, close and far – play in mediating the equity CF process for start-ups*” (Brown et al., 2019: 9). Moreover, it has been showed that participating to more than one CF campaign - i.e. serial CF - can be considered as an actual strategizing tool undertaken by startups in order to deal with the various challenges that a startup faces in its path of development (Fortezza et al., 2021).

In this line of thought, in this paper we are interested at shedding more light on the role of serial CF in innovation processes implemented by startups firms and on the way they cope with innovation processes emerging from serial CF.

3 Methodological notes

In order to answer the two RQs, the paper is based on a single case study methodology (Yin, 2003). The choice of this method rely on the exploratory nature of the RQs aimed at disentangling the complexity of the process of CF and its role in the development of innovation processes of startup. The choice of qualitative methodology is in line with recent call for more in-depth qualitative research on start-up and CF (Bessièrè et al., 2019; Brown et al., 2018; Brown et al., 2019) and represents a complementary methodology to existing contributions - mostly adopting a quantitative approach (Butticè et al., 2017) - on serial CF campaigns. Moreover, the processual approach in CF projects is called upon in recent contributions (Brown et al., 2019), is in line with IMP studies on new venture development and is deemed necessary to examine in detail the evolution over time of CF campaigns, while linking the analysis of CF processes to the overall evolution of startup, especially in relation to the innovation strategy.

The company selected for conducting the study is *Delta*. *Delta* started its activity in 2012, and was formally constituted in 2014 in the business of 3D integrated solutions, notably in the development of 3D printers to be employed in different B2B contexts.

Delta has been selected for two main interrelated reasons. First, it is active in a high-tech sector characterized by a fast evolving technology (at the time of the foundation), and thus allowing us for more easily catching the main innovation “upgradings” throughout different CF campaigns. Second, the company has been involved in five CF campaign with the same CF scheme - i.e. NECF. This “seriality” in approaching the CF strategy - characterized by a certain regularity in time of the campaigns form the

beginning on, and by the use of the same scheme - allowed us to trace the linkages between the CF and the innovation path followed by the company.

Data has been collected from different sources. Primary sources are direct semi-structured interviews and netnographic based analysis. Notably, three interviews have been conducted in the time frame January 2018-October 2021 with the co-founders of the startup. The average duration of the interviews is 1 hour. For what concerns the netnographic data collection, we analyzed a number of codified content items (comments, replies, posts and communications) from different Web sources such as CF platforms, company blogs/websites and their social media platforms, for a total of 16 pages of scanned material and 37 items in CF platforms of the five campaigns. Secondary data has been also collected, such as the companies' newspaper interviews, articles and press releases and used to complete our data collection and support the ex post reconstruction.

We then followed a systematic combining procedure, adopting an abductive approach (Dubois and Gadde, 2002) for the data analysis, given the explorative nature of case research based on a logic of investigation based on the match of theoretical approaches to the topic and empirical observations. In particular, the analysis has been based on the ARA framework that constitutes the conceptual frame of reference for the study (Håkansson and Snehota, 1995).

4 The *Delta* case

Delta is an Italian startup venture specialized in designing and producing resin-based 3d printers co-founded by Davide and Manuela.

Davide is an industrial designer with a long experience as an independent professional working for companies operating in several fields. He also is a creative maker (he defines himself a “self-made maker”) with huge passion for all forms of art. In 2012 he realized the potentialities of 3D printing, especially for makers. He was particularly intrigued by a new technology (i.e. stereolithography) which was less common at the time, but able to allow for better performance to makers because of a higher level of accuracy. His brilliant intuition was that of combining accuracy with design and portability of printers with the ambitious aim to create the first portable 3D printer. To this end he involved a friend of him (i.e. Manuela) in this challenge. Manuela is a multi-skilled professional with a strong on-the-field experience as a production and marketing manager in the interior design and fashion sectors. Although she had no specific background on 3D printing, she quickly learned the basics thanks to the training provided by Davide and greatly helped him in fine-tuning his initial product idea.

In 2013 Davide and Manuela presented their first prototype (as a ‘simple trial’) at an important exhibition fair in Rome dedicated to inventors and creatives. The project received strong attention because it was the first time that the concept of portability was introduced into the so-called “additive manufacturing world”.

In order to turn the prototype into a real product, they decided to launch a first explorative NECF campaign on Indiegogo (2013) with the specific objective of testing their product idea in an international competitive setting and:

“interact with knowledgeable people able to act as sort of co-developers in an open project.” (Delta’s co-founder Manuela, interview).

This first campaign was an unexpected success (see Table 1 for details) for the two co-founders since it had not been “professionally” built and no communication strategy had been implemented. What impressed Davide and Manuela was much more than the raised money (i.e. around \$15,000 out of \$1,500 as the CF campaign goal). In fact, they got numerous valuable tips from very committed backers as well as enthusiastic mentions on leading international online newspapers and magazines which made them feel that their product idea had been validated and successful.

Notwithstanding that, they also clearly realized that CF was not as easily managed as they had originally thought.

“We needed to study hard to get prepared for such a challenge!” (Delta’s co-founder Manuela, interview).

“I had heard about this powerful grassroots funding tool for dreamers without resources like me, but - to be honest - I only had a rough idea of it.” (Delta’s co-founder Davide, company website).

The CF campaign success persuaded them to formalize the creation of a real company in 2014, also thanks to the support of a digital startup incubator.

The initial product prototype was developed further, evolving into a several different models, by means of the continuous feedback from backers, that the company actively prompted through daily interactions either inside or outside the chosen CF platform. From this point of view, the first CF campaign was an icebreaker and a trigger for a network of committed and qualified “co-creators” to emerge. Therefore, from that point on, Davide and Manuela decided to systemically rely on (NE)CF campaigns (Table 1) to improve the product and boost the business as it became clear

that CF could be the perfect path for them to follow to access the market in an exploratory, co-evolutionary, and innovative manner within a potentially never-ending collaborative process.

“Our goal is to get the product into the hands of early adopters like you as soon as possible. We want you to be involved, whether to provide feedback on the experience, and we’ll be hard at work too, delivering updates and new functionality on a regular basis to add more performance and capabilities to the product.” (Excerpt from one of Delta’s CF campaigns introduction).

“Through CF campaigns we could get in touch with users who did not really want a structured product; rather, they wanted a smart idea to work on with us and we had to be able to interact with them. In a nutshell, our business domain was not ‘the whole market’ exactly, but the special market space built through CF campaigns.” (Delta’s co-founder Manuela, interview).

In 2014 the second CF campaign was successfully performed, again on Indiegogo, specifically to enhance the product. Just one year later, in 2015, it was time for the third (successful) CF campaign, on an Italian platform (i.e. Eppela), to further strengthen the product development process. These two campaigns provided a further validation to *Delta*’s existing products, which were enriched with new features, but also lead to a brand new item to meet additional requests by backers. In fact, in the same year a lighter-weight 3D printer was launched on the market again with a (successful) CF campaign (the fourth one), on the best-known international CF platform, Kickstarter.

In 2016, a new technology specialist and other part-time professionals joined *Delta*.

In the meantime, the company could benefit from the “long tail” of the previous CF campaigns which enhanced *Delta*’s direct sales as well as the brand’s visibility and reputation, above all through the special collaboration with some of the most active backers who acted as opinion leaders in creative fields consistent with *Delta*’s business. They got involved in dedicated special events organized or promoted by the company and voluntarily started to endorse *Delta* on their social media channels and in their professional circles.

Thanks to the brand awareness and reputation generated by the successful CF campaigns performed by *Delta*, the start-up was also involved by other companies to the development of projects in their behalf. In particular, a very important agreement was signed with a multinational

company operating in the dental industry for an important innovation project which became an important part of *Delta*'s business.

In 2018, a fifth CF campaign was launched, again on Kickstarter, but this time it was a failure with roughly \$4,000 collected out of an initial goal of \$25,000. Indeed, *Delta* very soon realized that the item put up as a reward (i.e., a 3D professional viewer) was more suitable for a business-to-business context than the one usually engaged by Kickstarter platform (which, on the contrary, relies more on a consumer context). Nevertheless, it can be argued that the start-up saw this episode as a valuable opportunity in marketing terms thus showing a clever tension to learning.

“It seems that, despite the success and the enthusiasm we received, the project is not yet mature enough to be considered a commercial product ready for the market. We will now take some time to review the project, thanks also to the feedback we have received; we will keep working on it, so you will still hear about it in the future!” (Delta’s CEO, CF campaign webpage).

“CF teaches you to always to be prepared to fix something in your product, in your working method, in your supply, even in your team! You always need to be flexible and responsive to find a new solution. That’s a great way of enhancing your company in the long run!” (Delta’s co-founder, interview).

Table 1 – *Delta*'s CF journey

YEAR	CF PLATFORM	PRODUCT AS A REWARD	FUNDING GOAL	FUNDING OUTCOME	No. OF BACKERS
2013	Indiegogo	A small and foldable 3D printer	\$1,500	\$15,642	51
2014	Indiegogo	A compact 3D printer	\$50,000	\$70,030	177
2015	Eppela	A compact 3D printer	€ 10,000	€ 11,053	43
2015	Kickstarter	A compact 3D printer (lighter-weight version)	€ 39,000	€ 61,328	134
2018	Kickstarter	A volumetric visualization device	€ 25,000	€ 4,093	10

Consistently with its market approach, the company is currently about to launch a new special product, a self-assemble 3D printer, and it will highly likely be through a new NECF campaign. From this point of view, *Delta*'s co-founders see CF as an experimental journey, in order to sustain, test and optimize each product which is introduced in the market until it proves ready to be sold through the company e-shop or specialized distribution channels.

“For us - our source says - CF is like a journey. Each time, we get to know something new and that provides us with new opportunities. We know well when we can stop experimenting with backers and move on to the next step, which consists of a more structured and linear distribution of the product.”
(*Delta*'s co-founder, interview)

5 Discussion of results

The *Delta* case offers insights over the role of CF in innovation processes, as it shows a company deliberately participating to these initiatives with the goal of developing new products and generating innovative ideas through the systematic collaboration with committed early adopters. This case study highlights that CF could represent a key tool for innovation and therefore a main component of the innovation strategy pursued by startup firms (Stank and Henard, 2016; Pollack et al., 2019; Hervè and Schwienbacher, 2018).

Beside the relevance of CF, the *Delta* case offers an empirical example over the evolving process of CF participation and innovation outcomes. The evolution seems to be characterized by three distinct phases: the “entry phase”; the “consolidation phase”; the “planned exploration” phase.

The “entry phase” is related to the first experience in the CF setting. *Delta* is aware of the potential benefits in terms of new ideas, but is not knowledgeable the CF mechanisms and processes, which represent a new playground for the startup. Therefore the basic attitude is to explore CF as a context for innovation in an experimental manner and face managerial difficulties when they emerge adopting different, incremental “not planned” solutions (Brown et al., 2018).

The “consolidation phase” is characterized by a more explicit CF strategy both in terms of product and platform choice. *Delta* founders have been keen in analyzing the first CF experience and thus learn how to exploit CF for their innovation goals. In this phase three distinct CF campaigns have been undertaken in a short period of time, pursuing always the NECF scheme as it represents a more adequate option for collecting new ideas and receive technical feedback (Hervè and Schwienbacher, 2018). This

apparently “linear” approach has been combined with a flexible orientation in terms of products and platforms.

This preference towards an “incremental” approach is shown in the recent phase where *Delta* attempts to explore new contexts and products within CF, while building on the previous experience of CF campaigns and interactions with active and innovative backers. This phase could be labelled “planned exploration” as *Delta* accepts to take on more risks. This is apparent with the most recent campaign where *Delta* has not been successful. Notwithstanding the negative outcome, *Delta* has been keen on learning from this experience.

The evolution of *Delta* in its approach to pursuing innovation through CF campaigns could be examined in more depth using the ARA framework.

In terms of actors, a key role is played by the founders. Davide is in charge of the technological side of the company and therefore has a main role in the interaction with active backers. Manuela instead is focussed on the administration and marketing sides and plays a key role in the actual planning and management of the CF campaigns. The *Delta* case highlights the relevance of active backers (Butticè and Noonan, 2020) since the first CF campaign, where an “inner circle” of passionate and supportive backers start following the evolution of *Delta* and provides useful technical feedback in the light of their strong expertise. This consolidated network is actively involved in the various CF campaigns (Brown et al., 2019) and therefore represents a supportive context *Delta* and its projects.

In terms of activities, the *Delta* case shows that the pursue of innovation-related goals in CF campaigns is linked to the implementation of ad hoc product development on the one hand and marketing and communication activities on the other. With regard to the former, *Delta* attempted to involve active backers for the provision of technical feedback and has placed great emphasis on activities promoting and supporting intense technical interaction. A wide and deep role of active backers has been possible because of appropriate marketing and communication activities – within and outside the CF campaigns – able to raise interest among potential backers and promoting word-of-mouth among technical experts in the field.

In terms of resources, CF campaigns have been themselves a relevant “source of sources” in terms of financing and technical knowledge. Success in the first CF rounds allowed *Delta* to invest financial resources in product development and marketing effort. However, the systematic use of CF has been crucial to generate and develop new ideas and technical feedback thanks to the interaction processes and to the combination of expertise held by the technical staff in *Delta* and the active backers representing a stable and committed source of knowledge (Butticè and Noonan, 2020). This has

meant – for *Delta* and notably for its founders and technical staff – devoting time, energy and commitment for planning and managing CF campaigns and their aftermath. This approach had a key role in the development of an inner circle of active backers, representing a main resource themselves in terms of relationships and networking opportunities.

6 Conclusions

The aim of the paper is to explore the role of serial CF in the innovation process of startup firms. The in-depth analysis of a case study – *Delta* company active in developing 3D printers and involved in five CF campaigns – provides interesting insights to be further examined in next research initiatives. The IMP approach and the ARA framework have been used to highlight the main underlying patterns and factors. This paper shows that CF – in its serial configuration – might represent for startup firms an “experimental temporary setting” for pursuing both product and organizational innovation. *Delta* case-study suggests that the “innovation profile” of serial CF processes might be characterized mainly by 1) an “inner circle” of “active backers”; 2) structured product development and marketing activities; 3) strong technical expertise and commitment – in terms of effort and time – by startup firm’s founders. These “features” could be taken into consideration by startupperes when evaluating or planning CF campaigns, as “seriality” in connection with “innovation” could represent the building blocks of a CF experience oriented to startup growth (Stanko and Henard, 2016).

Future research could further explore how CF and serial CF could spur innovation processes and outcomes, analyzing in more depth organizational practices and communication and interaction patterns, leading to business relationships development. CF campaigns are complex projects and might have “enduring” effects to be properly managed. However, it is well known that startup firms have limited resources, also in terms of time and commitment. Unveiling “best practices” in CF management (Fehrer and Nenonen, 2020) for innovation purposes could be very beneficial for emerging startup firms, which represent increasingly valuable actors in economy and society.

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The impact of covid-19 on the client-consultant relationship: a multiple case study

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1 Objective

The Coronavirus Disease 2019 (COVID-19) pandemic was unexpected and, similarly to other pandemics, it has had both short-term and long-term economic impacts on the global economy (Pencarelli et al., 2020). The COVID-19 pandemic has left its impact across industries, including the management consulting industry, which is heavily hit.

Due to the new ways of working and the government restrictions in the pandemic period, also the relationship with customers has changed deeply in terms of contents, frequency, tools used and ways of knowledge transfer.

Based on that, The aim of this paper is to explore how the consultant-client relationship changed due to the COVID-19 distinguishing the first stage (from February 2020 to May 2021) and the second stage (form May 2021 to ongoing).

2 Literature review

The management consulting in Italy is a highly fragmented sector, with a polarized structure between a very small number of large groups (2%) and many small and micro (98%) management consulting firms (Confindustria Assoconsult, 2020).

Management consulting is mostly based on human relationship, as Maister (1982) argued that professional services usually involved a high degree of interaction with the client. It emerges that the marketing of consulting services deals with two dimensions of the consulting approach: the human dimension (the relationship between the consultant and the client) and the technical dimension (the technical know-how needed to solve the client's specific business problem).

Relationship building, close collaboration, teamwork and partnership are emphasized in management consulting, and it has become common to speak of close client collaboration as a key factor for creating value (Carucci and Tetenbaum, 2000; Svensson, 2010; Ardley et al., 2016).

Despite a positive development of the industry and positive growth forecasts, consulting providers are confronted by numerous challenges including the potential of technology-based consulting services and internal processes, and thus the virtualization of consulting (Christensen et al. 2013; Greff and Werth 2015; Nissen and Seifert 2015; Nissen 2017).

The potential of a digital transformation of consulting, rethinking the traditional business and delivery models, seems to be gradually perceived by some providers (Seifert, Nissen, 2018). The virtualizability of a physical process is influenced by relational-related, synchronicity-related, as well as identification- and control-related factors (Seifert and Nissen, 2018; Overby, 2008; Overby et al. 2010).

With the advent of COVID-19 pandemic various types of human behavior (e.g., shopping, learning, working, meeting, and entertaining) shifted from offline to online, resulting in an accelerated diffusion of emerging digital technologies. Hardware technologies such as mobile devices and webcam-enabled computers play a fundamental role to provide services (Vargo et al., 2020).

Video-based communication platforms, for example, Zoom, WebEx, Facebook Messenger, and Google Hangouts, either became the "working assistant" to prompt conferencing digitally safely and effectively or built bridges to keep the social interaction. As a matter of fact, one of the most prominent technological activities present during the COVID-19 pandemic was telework (Wang et al., 2021; Bolisani et al., 2020). Besides email, online surveys, Google Sheets, and more, telework technologies utilize

digital information to exchange virtual services at work (Belzunegui-Eraso & Erro-Garcés, 2020). It seems that telework “increased efficiency, reduced risk of burnout, and weakened ties with colleagues and employer” (Baert et al., 2021).

3 Methodology

A qualitative research method has been adopted because it allows to grasp an in-dept understanding of a complex phenomenon (Narooz and Child, 2017). In particular, it has been developed a qualitative multiple case study research based on the empirical method of the semi-structured interview to consultants, leading the interviewee through specific questions, which stimulated the subject to provide opinions.

A purposeful sampling was adopted (Patton, 2015) based on the service activity that is providing professional services to SMEs, and number of employees that is less than 20 employees.

Based on these criteria, two small professional service firm have been selected (PSF1 and PSF2): both are in the province of Pesaro and Urbino and provides professional services to SMEs. In-depth interviews have been carried out in October 2021. For data triangulation, we compared the data collected with professional service firms’ website and social profiles and other documents (Yin, 2018).

4. Findings

Findings showed that the two firms were similarly influenced by the COVID-19 pandemic since the strategies adopted to manage the customers of both is particularly similar.

Initially, the challenge was to reorganize their job in a remote way as quick as possible.

Concerning the restriction period, quite similar for both PFSs, differences occurred on the remote working. In particular, while the PSF 1 noticed difficulties related to the internet infrastructures and the level of usage of digital tools, the PSF 2 revealed an aseptic interaction with customers empty of the human dimension.

Conversely the benefits linked to the remote working are the same: cost saving for the customer and time saving for the consultant.

Both consultants have expanded the services offered to customers (related to planning and scenario analysis for PSF1 and linked to the possibility of accessing to the state contributions for PSF2).

For what concern the second stage, both consultants confirm that the videocall meeting remain a tool to manage the relationship with customers. In particular, they noticed that thorough an increasing number of online meetings, their duration decrease, saving time for other activities.

In general, both consultants confirmed that the COVID-19 pandemic didn't have negative impact on the human relationship with their customers, in some cases they believe that the COVID-19 has strengthened it.

5 Value and Implications

The study has investigated the impact of the COVID-19 pandemic on the client-consultant relationship by enriching the extant literature.

In particular, findings showed how the crisis has provoked significant repercussions on the relationship management. These repercussions have been mainly derived from (i) the need to acquire an internet infrastructure capable of supporting management activities; (ii) the need to equip themselves as quickly as possible with mobile devices and digital tools in the shortest time.

From a managerial point of view this study contributes to highlight the challenges that consulting firms and customers have to face with and the relevance of digital transformation in this challenge.

In general, COVID-19 accelerated the process of digital transformation of both SMEs and professional service firms, both in the speed of change and the required investment in digital transformation.

From the client perspective, companies are forced to operate together with the COVID-19 but at the same time they try to imagine the “new normal”: in this sense, the needs of day-to-day operational management should live with need to plan for the future, in a phase of big transformation from a social, economic and political point of view (Hong, 2021). From the consultant perspective, small management consultancy firms could plan, create, and deliver value to customers, also providing digital experiential platforms (Pencarelli et al., 2018).

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Crisis and resilience in the post pandemic between trust and commons. The role of SME's strategies of adaptation in emergent European Green New Deal

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Keywords – Crisis, resilience, SMEs

Paper Type - Long Abstract

1 Multidimensional crisis towards commons as an answer

Crises are always an expression of the fragility of societies and communities or entire states, but today we should say - in the face of the outcome of the covid-19 pandemic - of the entire global polis organization and of how the different planetary political societies and communities are organized that push us to improve ourselves above all in cooperation for development, in: medical sciences, material and intangible infrastructures, regulatory institutions. So it's fair to say that crises are also tests of our resilience and require radical changes in the face of radical shocks like the health care crisis in 2020 for a diffuse global discontent (Stiglitz, 2020; Cappellin, 2020)). Because incremental adaptations activated by markets are no longer sufficient when crises take on systemic value in time and space in a risk growing society (Bech, 2018; Sandel 2015) . Like the one that took place from the fall of the Berlin Wall to the defeat of communist systems by launching a global capitalism seemingly without competitors and limits to get to the trigger of the first Internet crisis of 2001 to that from the invasion of Afghanistan and Iraq and that will lead to the tragic political-terrorist trail of 9/11. This will be followed by the 2008 subprime economic crisis that "accompanied" a chain of interconnected short- and medium-long-term

crises in a political-economic-technological-climate-health cycle from which we have never emerged.

A long and constant process, albeit at irregular intervals, that has injected both growing distrust into democratic systems and distrust of globalisation that should have better redistributed planetary resources and reinvigorated confidence in democratic systems with the benefits of "for all" growth resulting from open and transparent societies, while widening inequalities and increased environmental pressures. Will be extremely relevant in that landscape the industrial policy able to support the regeneration of SMEs in filiere trajectories coupling with local and global identity in searching of creativity and variety to push productivity and profitability in the long run generating resilience to the present and future shocks. That is why, in the effort to rebuild a post-covid-19 trajectory, we can (and must) look at a more balanced development horizon beyond emergencies by investing in the resilience capabilities (also by varieties; see Cattani Mastrogiorgio, 2021) of our societies by recomposing financial, health, environmental and social objectives also with a "Relational State" over dispensing and authoritative government.

The main objectives of the paper are, first of all, to explore the emergent landscape in global and local platform in post-pandemic evolution. Secondly, to define the transformation factors of competitiveness in the world and the role of connections between both State and Markets, institutions and people about democracy and participation. Thirdly, focusing the industrial policy EU necessary to sustain both a risk society and the regeneration of SMEs strategies for a long run adaptation increasing creativity and open innovation for improving quality of contest and community (Chesbrough, 2021).

2 Response to world pandemic as new emergent alliances between State, Market with people and SMEs networking strategies

It means relying - as in wartime - much more on centralizing decisions on the key themes of modern development, because markets as a form of decision-making decentralization are not able in themselves to inject self-regulation and balance with a medium-to-long-term look interweaving transparency, rigour and governance (and governance) decision-making rules. Where the public will have to gain as a support to institutions, businesses and families both financially and from the bureaucratic side to restore that trust in democratic institutions and markets that has been lost in the last 30 years. Demonstrating that they know how to spend the necessary resources that will come from Europe by facilitating the healthiest and most

active actors towards that line of transformation along the joint digital and environmental transition by investing appropriately on material and intangible infrastructure (from education to safety to health). A critical phase of exit from the crisis that will also require the transitional strengthening of the state's presence through appropriate investments in equity to foster the great convergence between strategic activities considered essential for the future and that are accompanied by those activated in Europe as a whole. Continental system investments (from universities, aeronautics, medicine, telecommunications, shipbuilding, etc.) to broaden the scope of these sectors on a European scale.

So with a *Relational State* that resumes its regulatory, stimulus and incentive centrality around an appropriate industrial policy strategy starting from support to citizenship and for those services that are part (bottom up) of the *common goods* of an inclusive-democratic country such as: school, health, infrastructure, research, justice. With an overview of public participation between the listed and coordination that could foster an industrial strategy that makes system and also involves the unlisted and most of our SME's in Europe and in Italy. Those inclusive activities (health, school, research, infrastructure, justice) that are the backbone of a country but also the "bottom-up" source of greater protection in the face of shocks, dynamically protecting families and businesses from the whippings of current and emerging crises. We therefore need to start an industrial strategy that puts the transformation of the production system at the centre by rebuilding the foundations and conditions for a new social and political development. With a *Relational State* that can't be reduced to acting as an "urban vigilante" by lighting yellow and red lights or what you can't do, but also using green for what you can do actively by not just treating the damage that the epidemic and health crisis are creating accompanied by the financial crisis. So a State that stimulates markets, organizations and institutions to reform themselves by co-creating shared value and innovation for an emerging economic, social and environmental resilience by pairing green and digital transformation able to reduce inequality (material and immaterial). A "selective" trajectory that is able to lift the country in the post-covid-19 from its historical delays: a – north-south inequalities; b - digital divide; c - access to SME (open) innovation with policy for diffusion; d – eco-systemic reinforcement of key supply chains along the ridges (Adriatic, Tyrrhenian, Alps and Apennine).

Around the integration between technological and green innovation in close connection with Europe to produce, consume and plan differently with appropriate local "endogenous" industrial policies well welded with macroeconomic policies by acting on "exogenous" factors (Cappellin et al.,

2019; Cappellin, 2004). And it is for this obvious that we need a different mission of the PA (local, regional and national) focused on greater skills and lighter to exercise the address capacity necessary to integrate and monitor the different intervention actions both on the side of Regional Agencies and on the technocracies side of Eni, Enel, Leonardo, Fincantieri and State Railways.

3 Stakeholdership for a growth with sustainability and responsibility

For those reasons will be necessary to reconsider opportunity to growth for *stakeholderships* and *commons good* approach in emergent european Corporation oriented to mature CSR strategies, in particular after covid-19 crisis.

The implications of a concise analysis of the legal structure of the company on both the corporate law and corporate governance side are evident, and that are in place in the temporal indeterminacy of employment relationships and contracts on the one hand and, on the other, the notion of responsibility that property rights' approaches or those of the Agency are able to deal with strictly.

So, we can reasonably ask (Deakin, 2015): are we in the presence of a company without ownership or ownerless?

The answer is no. Simply because it is the assets of the corporation involved that cannot be fully identified as exclusive assets of individual specific subjects, but as common goods or *commons*: goods that can be treated by the legal system as not excludable in the absolute sense, but we could also say unrivalled, as an expression of a high specificity, historical and cultural before economic and technological. Owners exist – as known – and act on the boards of listed companies to condition the formation of the values of the securities, as in the boards of the unlisted to choose managers, remuneration and investment trajectories.

The covid crisis has pushed in advanced these main problems for the future of new and emergent european Corporation with a small group of it riding innovation and best performance. But if productivity and wages doesn't increase is a clear signal of scarce social effect of innovation as a function of a reduced diffusion process. The main solution is to push open innovation by inside and outside of the companies. Is necessary a State that improve quality of contest (infrastructure, education, transport, basic research, ecc.) able to improve diffusion process of open innovation. About SME strategies we need to reinforce enormously network process of open innovation by filiere and region coupling with inter-districts processing along frontiers of innovation and logic of urban chain services. Improving

possibly the level of labour participation to the enterprise strategies for a new organization able to push intelligent collaboration changing hierarchy modeling and business model as well cooperative employeeship, leveraging cognitive productivity and creativity for resilience (Cattani, Mastrogiorgio, 2021).

4 Europe, sustainability and resilience

A design that requires an enormous capacity for institutional reform by crossing financial instruments into an injection of confidence that through a national and European project leverages a participation of civil society as happened in the post-war period. A Europe as a global player in a strategy of resilience possible and sustainable in planetary balances that first can rethink the way we produce and consume, work and learn, connect and team up, becoming a community capable of reducing the now unsustainable pressure on the use of natural resources. That is why despite covid-19 and indeed even more precisely for this pandemic and its nature that the green transition remains the cornerstone of European policies of the next 30-50 years through the leverage of economic sustainability as much as products and services as well as ways of producing and consuming.

The fight against climate change is in the hands of this generation of young people from all over the planet who better appreciate its wealth and knows how to adapt conditions to reverse the unsustainable trajectory of climate change triggered by global warming function of a reckless use of the finite resources of the planet. Also listening to the voice of science and pushing politicians to act now or it will be late , starting with the Paris Agreement and the Sustainable Development Goals contained in the UN-2030 Agenda.

The 2030 environmental targets and climate neutrality to 2050 require alliances and collaborations in *supernational organisms* to take a m-l term development trajectory, having exhausted the positive momentum that had brought us out of the tragic 1900s. So looking at *green policies* as levers of new employment creation and a different quality of growth with development by taking the path of circular and sustainable models in the responsibility of production models that demand increasing socialization of risks for the increasing involvement of science that calls for long and not short-term (Pilotti, 2017,2019), such as the discovery of a drug or a vaccine against the pandemics of today and yesterday.

New *circular economy and green new deals* must converge towards inclusive citizenships reducing the pressure on the irresponsible use of natural resources but we need of structural reforms (burocracy, justice,

labour markets, property rights, ecc.). In this way we must put our hand to the overall product cycles starting from a design that is sustainable from first phase to the last one and planning production and technological models that are equally so. Working on the long life cycles of products and their reuse and regeneration so that they remain as long as possible in European territories without "unloading" inefficiencies and diseconomies outside with an emergent role of networking of SMEs for creativity and innovation pushing competitiveness of territories.

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*Values and Humane
Entrepreneurship*

From values and purpose, to overcome the Pandemic: MGA of the “Poliambulatorio Risana”

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Abstract

The aim of this study is to explore how a humanistic-driven business faces critical scenarios, like that of the Pandemic, through the case study of the Risana Outpatient Clinic. The research question are: how did the pandemic affect the Risana Clinic? Are there specific key-factors for resilience and sustainability?

The study intends to focus on the type of relationship that links purpose, values and culture, on the one hand, to governance, strategy and performance, on the other.

The Humanistic Management (HM) theory supports a vision of the enterprise in which the centrality of the human person is essential for successful business management (Barnard, 1938; Mele, 2016). Mintzberg proposes to rebuild companies as communities as a successful sustainable strategy (Mintzberg 2009).

The theory emerging from the Economy of Communion experience underlines that “Communion” is at the same time the business purpose and a key-resource towards business flourishing.

The present case study provides an empirical insight about the topic, showing how the Risana Clinic was able to cope with the Covid-19 challenges.

Keywords – Humanistic Management, Economy of Communion, Covid-19, Communityship. Purpose-driven

Paper type – Academic Research Paper

1 Introduction

January 30, 2020 marks a defining moment in Italy: in fact, the first official ascertainment of two cases of Covid-19 infection in the country (among the first in Europe) dates back to that date. As it is known, the first viral outbreak was detected a few weeks later, on February 21, in Codogno (LO), in Lombardy, triggering an exponential chain of infections that unfortunately would cause the death of thousands of victims in a very short time. When the World Health Organization officially recognized the SARS-CoV-2 pandemic on 11 March, Italy was already in total lockdown. The dramatic and unpredictable epidemic outbreak completely disrupted the lives of millions of people, with repercussions on an enormous scale and scope at all levels. The economic system was also heavily affected: the drastic measures to contain the contagion, starting with the generalized confinement and the closure of the non-essential productive activities, in force from 9 March to 18 May 2020, represented only the beginning of a series of critical issues, which have placed a heavy burden on Italian companies, with severe consequences, especially for smaller businesses. A year and a half after those first moments, it is possible to look at the reality of the facts, re-reading their experience, to learn new lessons from life, considering the knowledge now available, in hope of transforming, as far as possible, the crisis into opportunity.

The aim of this work is to explore how a purpose-driven enterprise has faced and managed an exceptionally difficult scenario, such as that of the Pandemic. The research questions are as follows: how did the pandemic affect the Risana Clinic? Are there specific key-factors for resilience and sustainability?

The study intends to focus on the type of relationship that links purpose, values and culture, on the one hand, to governance, strategy and performance, on the other.

As for the methodology, the qualitative approach of the case study is particularly suited to the needs of understanding a complex phenomenon such as that of business behaviour through an empirical method (interpretative orientation) (Sena, 2021). The unit under investigation, represented by the Risana Clinic, 20 km south of Florence, was identified based on the following criteria:

- it is a purpose-driven enterprise, committed to the Economy of Communion (EoC) network, with twelve years of history;
- located within an important EoC business park in Italy and in Europe;
- it is a SME, like most Italian and European companies;
- close to the researcher, which facilitates data collection and direct observations.

In order to ensure rigor and reliability, a research protocol (see Appendix, no. 1) was developed, according to the framework of Yin (Yin 2018).

This work opens with a review of the relevant literature. The theoretical framework through which we propose to analyse this case study is represented by the perspective of Humanistic Management, with particular regard to the contributions of C. Barnard and H. Mintzberg, regarding the vision of the company as a community and widespread leadership (“communityship”), typically present in organizations that see and build themselves as communities; from the same perspective, the literature relating to the Economy of Communion is taken into consideration, a reality to which the Risana Clinic is linked; for the purposes of a better understanding of the case, it is also considered useful referring to the Mission-Governance-Accountability interpretative paradigm (Matacena, 2017); equally relevant for the purposes of this research are the studies relating to the impact of the pandemic on Italian SMEs. We will then proceed with the case study of the Risana Clinic, framed through a synthetic historical reading and an analysis carried out through the Mission-Governance-Accountability paradigm. This will be followed by the focus on management events from March 2020 onwards, considering the theoretical contributions.

The results of the empirical investigation can be summarized as follows:

- The Risana Outpatient Clinic managed to achieve a substantial breakeven budget in 2020, despite the Pandemic, increasing the total number of customers.
- All other conditions being equal, the merit for this result can be attributed at least in part to: some winning initiatives planned by management and implemented during the lockdown, thanks to proactive management and a collaborative commitment of 95% of employees, highly motivated and ready to work beyond the paid time and their respective duties; good management of government Covid-19 economic support measures;
- On the basis of the information collected, it is quite evident that the body of values, such as solidarity, reciprocity, gratuitousness and respect for the human person, rooted in the culture of the organization, have played a very important role in guiding the company to make winning strategic decisions during the Pandemic and implement them effectively, thus overcoming the crisis (resilience).
- It also seems true that the culture of communion involves a particular generative process in relationships, thanks to which the key-stakeholders are strongly engaged with the organization, providing support and involvement

in governance, ensuring flexibility and agility and forming excellent foundations for recovery and the consolidation of growth.

2 Literature review

According to the definition proposed by D. Melè, “Humanistic Management (HM) regards concern for persons and human aspects in managing organizations. It is oriented not only to obtaining results through people, but also, and above all, toward people themselves, showing care for their flourishing and well-being” (Melè, 2016, 1:33). This is a recent theoretical paradigm, which acquires importance from the first decade of this century thanks to the Humanistic Management Network (Spitzeck et al., 2010), but which has significant antecedents. HM can be also defined as the theory of “human-centered management” (Melè, 2016, 1:37). The vision of the human being that emerges is that of a "person", of a relational being, free and capable of cooperative relationships aimed at the common good. Chester Barnard in the 30s of the last century offered a deeper look at people: “...observing the human person in depth, highlights their potential, needs and motivations, and opens up a new vision of the business, as a space for internal and external interpersonal relationships, and in the end defining "conditions of communion" (Barnard, 1938).

In this line of thought the contribution of H. Mintzberg is particularly interesting, who hopes for companies capable of looking at themselves and reconstituting themselves as a community (Mintzberg, 2009). In his long and in-depth research activity, the author observed how many important successful companies have been able to cultivate and nurture a sense of community among their members. He argues that rebuilding companies, as a community is the main way to pursue sustainable development, not only for the company itself, but also for society as a whole. In fact, the "members of a company that has a robust sense of community realize how much their organization depends for sustained success on constructive engagement with the communities around it" and "see themselves as responsible citizens of the broader community” (Mintzberg, 2009, p.143). He explains, "Community means caring about our work, our colleagues, and our place in the world, geographic and otherwise, and in turn being inspired by this caring." He uses a neologism, "communityship", to indicate a leadership style that he attributes to a "engaged and distributed management” (Ibidem, p.141): the commitment is aimed at promoting involvement and participation, intervening only where and when necessary. He speaks of a "middle-out" approach rather than top-down or bottom-up. In order to build

the community, he identifies in the middle managers the key people to be involved in triggering the change (Ibidem).

The Economy of Communion (EoC) represents a vast movement of thought, theory and practice, which in thirty years of life has reached and involved thousands of people all over the world. Among the rich theoretical reflections stimulated by the thirty-year experience of the EoC we highlight some of particular importance for the purposes of this study. The first concerns three fundamental pillars on which the life of these companies is based. They are dialogue, trust and reciprocity. "Dialogue, understood as a true dialogue that generates self-confidence, is the result of attention and a positive and sincere bond" (Del Baldo, Baldarelli, 2019). Trust, "vinculum societatis" (Locke 1954 [1660], in Argiolas 2014) is essential to authentic and fruitful dialogue (Argiolas, 2014). Reciprocity is understood as "connections that hold a city together. This bond is plural, but its various expressions have, in the coming and going, in giving and receiving, in giving and returning and in reci-pro-cum, a common denominator" (Bruni, 2006b:, in Del Baldo, Baldarelli, 2019). The highest form of reciprocity implies the "presence of an intrinsic reward that the actor derives from the action itself, before and independently of the outcome" (Ibidem). The constant effort in EoC companies to translate these principles into decisions and daily operations has led to the emergence of a typical leadership style, producing a corporate governance with particular characteristics. "The role of the individual manager leaves room, in these companies, for a choral figure of manager, in which everyone has his" active "role and is involved in the management of the company, where, there is a leadership that listens, promotes and involves people, manages to create new services with the collaboration of others, making them participate" (L.B. Specht, in Baldarelli, 2005). This point fits perfectly with Mintzberg's concept of "Communityship". As for accountability, it is noted that in the EoC businesses "there is a sort of refinement also in the reporting tools, because one of the salient aspects of these companies is the communion that results in the reciprocity of relationships. This reciprocity, in turn, influences the mission and governance" (Baldarelli, 2005). Another key category in EoC theory and practice is the dimension of gratuity. Without gratuity, the community - even the corporate one - does not generate communion. (Bruni, 2014). Gratuitousness is a connatural element, unavoidable and essential to human relationships, even in work contexts, and for this reason, it has full voice and economic value (Gui, 1999). According to some authors, a new way of looking at business and its raison d'etre emerges from the EoC's practice, a theory of business centered on the person (Gustavson, Harvey, 2020). In fact, they argue, "the purpose of EoC businesses goes beyond

sharing profits": they aim at "creating a new way of doing business centered on the person and humanizing the economy" (Ibidem).

In order to understand and illustrate the current reality of the Risana Clinic, the interpretative paradigm Mission-Governance-Accountability (MGA) (Matacena, 2017) is used, which offers a key to understanding the corporate ideal-type. "Its essential life experiences" in fact pass through the "bidirectional systemic coordination between mission, governance and accountability" (Ibidem). The corporate mission consists of the objectives of the subjects ("King") for which the company exists and from which it was born. The subjects who ultimately have the power / right to control the results. Corporate governance is expressed by the methods of governance (chain of command-direction-control) of the same and by the relationships between governance and control activities implemented by the responsible party, the manager (King Maker). Accountability is understood as the information system for external reporting of company summary results, including those deriving from the company-environment relationship, environment considered in a broad sense, including all areas and subjects with which the company interacts and which are interested in it. (Baldarelli, 2005). It is the area of relevance of the so-called "Controller", responsible for the information addressed to the King Maker (Manager) as a decision support system, to the King (ownership), to evaluate the company performance and finally to the various stakeholders (Matacena, 2017).

According to this paradigm, the structure of the relationships between mission, governance and accountability can be configured in a variety of modulations at the extremes of which we can place the ideal-type of the joint stock company on the one hand, and that of the social enterprise on the other (Table 2, in appendix).

For the purposes of applying this model to the reality of the Risana Clinic, the following is observed: the legal institution of the cooperative differs from the legal forms of business typical of profit-making companies as it incorporates the principles of prevailing mutuality and solidarity, principles that make it its ethical anchoring explicit and make it possible to consider it a socially responsible organization. The principle of democracy (one person, one vote) typical of cooperatives generates shared and participatory forms of governance, with equal dignity of the subjects involved. (Matacena, 2017). The explicit adherence of the Risana Clinic to the EoC network underlines its social vocation. In consideration of the above, in applying the MGA interpretative paradigm to the object of investigation, it is reasonable to expect a convergence of the Risana business case towards the "Social Enterprise" ideal-type.

3 The scenario in the Covid-19 pandemic

The Covid-19 epidemic hit Italy, as in China and then, unfortunately, in many other countries, like a violent tsunami, causing immediate disastrous effects on several levels and triggering a series of negative repercussions, whose echo is still far from dying out. It has represented and represents a serious threat to the survival of SMEs: the drastic measures to contain the contagion imposed by government authorities, from social distancing to total lockdown, have led for most of them significant reductions in turnover, with consequent negative repercussions on liquidity and profitability (Cesaroni, De Martini, Pencarelli, 2020). At the end of 2020, more than 33 percent of the companies with fewer than ten employees were considered at risk, 26.6 of small (10-49 employees), 10 of medium-sized (50-249 employees) and 15 percent of large (250+ employees). Among the most affected sectors, with the most vulnerable activities, are construction, trade, tourism, catering, entertainment activities and other personal services (ISTAT, the impact of the health crisis on businesses, 2020). Understanding how the epidemic crisis has affected businesses and how to react strategically is important to “successfully navigate towards the future” (Ritter, Pedersen, 2020). Tuscany, and especially the province of Florence, was also hit hard by the pandemic. In July 2020, IRPET, “Istituto Regionale Programmazione Economica della Toscana”, estimated a decrease in industrial production in Tuscany in the first four months of the year compared to the same period of the previous year of 21.9%, compared to an Italian average of 18.6%, and foreseeing an even worse scenario for Florence and its province (- 23.4%, IRPET, 2020).

From the point of view of the economic sector to which the Clinic belongs, two aspects should be highlighted. It was found that in general private activities operating in the field of health services benefited in 2020 from an increase in demand, caused by the saturation of the National Health Service for the pandemic emergency. This phenomenon, however, has not been reflected in the specific field of dentistry, in which public service is almost non-existent. Suffice it to say that the 2019 share of private healthcare expenditure for dental treatments in Italy was equal to 92% of total expenditure, compared to 56.3% for specialist medical services, 23.3% for diagnostic services and 9.3% for hospital services (Statista, ISTAT ID 796183). As for the impact of the crisis on the dentistry sector, ANDI (Associazione Nazionale Dentisti Italiani) attests an average decline in turnover in 2020 of 13%. Through a survey carried out by ANDI itself in October 2020 on a sample of 1888 dentists, the main cause identified is the decline in care and treatments, in turn determined by the economic

difficulties of families, and, to a lesser extent, to fear of contagion and travel restrictions (ANDI, 2020 Report).

4 The Risana Outpatient Clinic

The “Risana Outpatient Clinic”, a service and work cooperative represent the unit of investigation of this study. It is located in the Municipality of Figline and Incisa Valdarno, in the province of Florence.

4.1 History

The Risana Clinic was founded in 2008, on the initiative of a small group of founding members linked to the world of health-care, and in particular, to the dental profession, one of whom had already been the owner of a professional practice active in Incisa Valdarno for over ten years. The shared purpose was to create a health, dental and other specialty Outpatient Clinic, inspired by the "culture of giving" and the principles of the Economy of Communion, which could be established at the EoC Lionello Bonfanti business center, inaugurated just two years earlier. The explicit *raison d'être* of the new reality, "putting the person at the center", is declined first of all in the choice of the legal form: a cooperative, a legal institution that by nature favours the personal, relational and sharing element between the participants, putting the economic purpose in the background. The focus is on excellence of services, but accessible to all. A questionnaire was distributed to a thousand families in the area, in order to investigate which health services were identified as necessary and at the same time lacking.

The first group of members, made up of 12 people, was motivated and cohesive. There was a charismatic leader who animated the team - the dentist who owned the previous practice, also legitimized by professional competence, strong commitment, and good entrepreneurial and managerial talent, but the leadership style is open, widespread, based on broad involvement and full confidence; everyone, dentists, assistants, secretaries and collaborators, were invited to participate in the construction of the new clinic, even sharing the decisions relating to furnishings. (Mintzberg, 2009). Always in line with the same ideals, the founding members also decided to create an association, called "Hello! Health to share Onlus" that supports the cooperative, supporting initiatives for the promotion and dissemination of EoC values in the health-care sector and in particular, to raise funds to subsidize dental care or other medical specialties for people in economic difficulty.

Table 1 summarizes the Risana Clinic main information, comparing the start-up phase to the current one.

TABLE 1 – Risana Outpatient Clinic in numbers, 2009 versus 2020

Sector: health services - Core business: dentistry Other activities: various specialist medical services		
	2009	2020
Coop. Associates	12	22
Turnover	254.000 €	780.000 €
Clients	4.000	14.000
Employees	7	17
Dentists / Hygienists	3+1	13+3
Doctors	3	11

4.2 Mission

Art. 3 of the Statute specifies the purpose of the activity as follows: “The cooperative is not for profit; its purpose is the pursuit of the general interest of the community in human promotion and the social integration of citizens. The cooperative was created to offer services in the health and social-health sectors and is inspired by the principles of the Economy of Communion, [...] The members believe it is fundamental to recover a vision of medicine based on respect and the value of the dignity of human life and to combine it with technological and scientific progress for a professionalism that points to excellence and brings the person back to the center of interest in the medical art. [...] Annually the Members’ Assembly, on the proposal of the Board of Directors, allocates resources to the development of the Cooperative, to training and to special solidarity funds both for indigent people and for social and health-related projects inspired by the principles of the Economy of Communion”.

The current Health Director of the Risana Clinic, as well as a founding member and charismatic leader of the activity, expresses it thus: "To combine the values of the Economy of Communion with a service to the person centred on the true good of the person ... considering the" Evidence based medicine "(EBM), which [...] means a health that is based on the evidence of the theories, protocols in use, for the good of patients [...]. Here, perhaps, what more we wanted to bring was to look at each patient as a person, unique with his priorities, his needs, his economic possibilities, his personal resources, and therefore beyond the expectations etc., and therefore practically succeeding in having the value of appropriateness, combining clinical and technological excellence but with the possibilities, resources and expectations of the individual patient" (I-01).

From the above, the social, community dimension, the broad scope of the purpose of the activity, as regards the object and the recipients, clearly emerge: a multidimensional mission (Matacena, 2017).

4.3 Governance

Art. 3 of the Statute itself is explicit as to the governance style chosen by the promoters of the cooperative: "The centrality of man in every initiative of the community, with particular attention to people who do not have the resources to express their potential, the fraternity lived in the workplace and the culture of giving in the economic world are the basic principles of the organization of work and company management. The internal dynamics and governance of the Cooperative will be based on participation and reciprocity through management bodies and processes, which can become "structures of communion" inspired by the spirituality of unity, the specific purpose of the Focolare Movement⁹".

From the point of view of the organizational structure, there is a President, a Vice President and a Board of Directors (BoD) with 5 members, representative of the functional areas and professional figures of the Clinic. The Medical Director participates by right in the Board of Directors. There is also an operational team, made up of de facto members of the Board of Directors daily present in the Clinic, with the addition of a representative figure of the ASO (Dental Practice Assistants, that is, dental assistants). The operational team actually carries out a coordination and connection function, effectively creating a collegial and participatory direction.

There are numerous and almost uniformly agreed passages in the interviews with the members of the team of the Clinic, members and non-members, which attest to the above, testifying to a serene, familiar working climate based on collaboration and engagement, on reciprocal and gratuitous relationships. Regarding the decision-making processes, the vice president puts it this way: "Question (D): the decisions that are made: is there someone who has the last one word, or is it all decided unanimously? Answer (R): No, it is decided collectively. - D: Collegially. And as long as there is no unity, it is not decided R: In short, it is debated. D: We argue. But the point of arrival is still a shared point. A: Oh yes" (I-05). A collaborating hygienist tells how she was positively affected by this style of behaviour: "They have a concept of life, how can I say? a little bit far from

⁹ The Focolare Movement is a movement of spiritual and social renewal, founded by Chiara Lubich in Trent, Italy, in 1943, during the Second World War. Officially known as the Work of Mary, it was approved by the Catholic Church in 1962. It is now present in 182 nations and more than 2 million people share closely in its life and work (www.focolare.org).

me, ok? But it is a concept that I like. The fact of sharing, the fact of always being of help to others, I like that. It's nice. I see it in the things that people who belong to this group do; that they do not because there must always be an ulterior motive. So it comes to me willingly to me too, if sometimes I am asked for a favour, or what, to do it" (I-29). One of the founding members describes the company organization chart in this way: "You breathe a very good air, an air of friendship and collaboration, where people's roles never mix, they always remain well defined, but at the same time, there is it is an area of great collaboration, mutual trust, respect and I would say that, if I had to define it, there is no top-down type structure with one or more people at the head, but there is more of a horizontal type structure with circles concentric, where naturally at various times someone can be a reference and authoritative and in others, however, trust is still given" (I-12). A collaborating dentist goes even further: "It's not always easy to relate even very different people, who have very different stories, come from very different backgrounds, but it's also very beautiful, isn't it? In the sense, that is, trying to make a company like a small community is an important goal" (I-28).

Therefore, here too we see the features of a multi-stakeholder and participatory governance, consistent with the corporate mission (Matacena, 2017). The interviews also show appreciation for the periodic training sessions organized by the company for staff, aimed precisely at the development and consolidation of relational skills, considering the reference values in the EoC culture (Mintzberg, 2009; Baldarelli, 2005).

4.4 Accountability

The information system of the Risana Clinic produces the classic financial reporting according to the law, consulting qualified external professionals for the preparation of the financial statements and its audit. The relatively small size of the business, the fact that most of the shareholders are workers, as are most of the members of the BoD, in fact reduces the perception of the need for a formalized internal reporting system with respect to corporate life and the achievement of its goals. Many of the communications relating to this type of information are conveyed orally, in the course of periodic meetings and moments of informal exchange (such as lunch breaks), or through mail and internal messaging platforms.

As regards the reporting to external stakeholders, the self-assessment document drawn up at the request of the competent authorities for the granting of the health authorization already contains the provision of a "colour" budget in narrative form, according to the RainbowScore approach (Parolin, Golin, 2003), in accordance with the guidelines for running an EoC

business (<https://www.edc-online.org/en/imprese-alias/linee-per-condurre-un-impresa.html>), as an expression of voluntary reporting to better account for the plurality of objectives pursued and achieved through business activity, for the benefit of the various stakeholders (Baldarelli, 2005; Maticena, 2017).

It also highlights the opportunity of reporting tools suitable for expressing the value linked to the typical elements of an EoC enterprise, such as that of reciprocity and gratuitousness relationships, which have proved to be crucial in the management of the pandemic emergency.

5 The Covid-19 pandemic: the experience of the Risana Outpatient Clinic

5.1 The Risana pandemic crisis management

2019 is a satisfying year for the Risana Clinic: turnover still growing, gratified patients always bring new ones, investments related to the start of the activity are now paid off, younger dentists, after the first years of running-in, begin to pay off. The company's financial situation improves, creating the conditions to tackle new development projects, with the expansion of the offer of health services and in particular the opening of a multipurpose space for active seniority, next to the Risana Clinic.

The reconstruction of corporate events in the context of the pandemic event is mainly based on the series of interviews collected by each of the people belonging to the clinic team. The accounting data drawn directly from the information system and processed for the purposes of the study allow to evaluate the net economic impact: however, the testimonies of those who lived directly from the inside those difficult months reveal all the drama and the complexity of the scenario, as well as the dynamics of decision-making and operational processes that characterized that period. The main facts, their implications, critical factors and reactions put in place by the company will be presented below.

February 2020: the rapid spread of Covid-19 infections in China is followed with moderate concern.

Beginning of March 2020: the epidemic worsens day by day, restrictive measures are needed in increasingly wider areas of the territory. The network of contacts of the Risana Clinic with health experts, the presence of a family doctor - who guarantees an immediate communication channel with the health authorities - and the direct line with the police forces allow the company to have accurate and prompt information on the restrictive measures in the process of maturing, sensing a few days in advance which scenario was about to take shape. Despite the uncertainty of the period, it

was decided to hire an employee, a former collaborator who was looking for work again after a period spent abroad. The medical director says: "Arrived at that moment, precisely because of the relationship of trust, of gratitude, for what she had done, she made us decide to immediately include her for a few hours a month, but this new fresh, gritty workforce has brought a great liveliness and also helped all the changes of holidays, so much so that in September with the increase in work we found ourselves able to integrate it with more hours and gradually and now it is practically, it has reached the number of hours he wanted to do" (I-01). A decision made for the good of the person, which later turned out to be positive for the business (Chillemi, Gui, 1997; Baldarelli, 2005).

March 9, 2020: total lockdown is triggered. The activity of dental practices (ATECO code 86.23.00) is not included in the list of the essential activities. Only emergency services (toothache) are allowed. In addition, the dental staff and consequently the entire clinic are exposed to a high risk, since it is a disease that spreads by oral infection. Official security protocols are not yet available, partial and fragmented information is circulating and Personal Protective Equipment (PPE), starting with the masks, are difficult to find. Part of the staff of the Risana Clinic resides in other municipalities, some even in other Tuscan provinces, and the difficulty in moving around is added to them. The worry is great and there is no lack of fear, but the Risana team reacts promptly and compactly, as well expressed, albeit with different accents, by each of them: "Then S. (the Medical Director) was very good on that occasion to be present and point of reference, [...] it was a day, a normal morning, immediately she said: let's do this, let's write this, let's send this to everyone, move the appointments... that is, there was a decisive intervention, in short, that made me very happy" (I-31). "...It was necessary to understand what our role was in this situation. Any case, more than a role [...] how to survive, right? Even as a company or ... the service to the person ... even at a total level of person" (I-08). "It was asked who preferred to stay at home without working, who preferred to come... Being among the closest, and in any case the one that is not that I have at home maybe subjects who could be at risk of contagion, maybe a moment older... So I felt it, just to leave my colleagues at home" (I-13). "All the work done for ten years before, of participation in decisions, of involvement, of circularity, of management, has been seen as a result in these difficult times, where we have all cleaned up together, we all sweated together, and each gave up something,... so we say that we have these famous relational assets and this widespread participation has rewarded the company in a decisive way, so that precisely not only we did not stop when there was the possibility to restart, but we started in fourth gear" (I-01). One of the winning strategic

moves was the timely implementation of the safety protocols, made possible by the professional resources available among the network of collaborators of the study, and by the cooperation of the entire personnel, who participated in the on-line training sessions organized during the closing weeks, and then activated themselves on the basis of their respective skills and the specific area of activity for the elaboration of the protocols and the procurement of the necessary PPE, making available free of charge even unpaid hours (Bruni, 2014; Gui, 1999; Baldarelli, 2005; Mintzberg 2009).

"Surely a nice thing was trying to organize ourselves in small, almost spontaneous groups, because we needed these protocols, and therefore in order to get back to work, the fact that we started working in groups, we also felt at home, in my opinion"(I-24) (Mintzberg, 2009)."In May, when the protocol came out, we started on the 4th, around the 20th the protocol of the dental offices came out, which was just slightly less rigorous than ours. [...] We were ready, indeed, with a slightly more severe procedure, which we decided to continue to maintain the severity we imposed ourselves, because it was dictated by a self-awareness that, we achieved together" (I-01) (Mintzberg 2009).

The timely preparation of protocols and protective measures has allowed the Clinic to resume activities safely as soon as the competent authorities have authorized this. The quality of the interventions put in place and the discipline of all the staff who have continued and continues to respect them to date has transmitted to patients a sense of trust and security, triggering a virtuous chain of word of mouth. Starting from August 2021, a questionnaire aimed at measuring the degree of satisfaction was administered to the customers of the Risana Clinic: the analysis of 87 questionnaires confirmed a level of customer satisfaction very close to the maximum value also with regard to safety measures. An unexpected site inspection carried out by the health authorities on 30 September 2021 confirmed the adequacy of the protection measures still in place. The PPE adequacy was first attested by the fact that no one, neither among the staff, nor among the patients or other people who were exposed to the Clinic, got sick. Here is what a dentist reports: "It was very challenging. However, in short, we have adjusted the shot, along the way; now we have resumed at an almost normal pace. We have also seen that the anti-contagion rules still work. They told me that no one here got sick after all" (I-33).

The persistence of the administrative staff has also allowed the Outpatient Clinic to seize all the opportunities for financial and economic support offered by government authorities and trade associations, accessing non-repayable grants of a sufficient value to reach a substantial budget balance in 2020. A loan at a subsidized rate was also activated, thanks to the

strengthening of the Guarantee Fund for SMEs. Management control suggested introducing a slight adjustment to the price list, on average equal to 5%, to compensate for the higher costs produced by the implementation of the protocols. Finally, a cooperating member intervened with an extraordinary grant of 35 thousand euros. (Bruni, 2010; Gui, 1999; Baldarelli, 2005; Mintzberg, 2009).

The analysis of the interviews collected also confirmed that the information gradually available on the relevant aspects of the crisis - risks, preventive measures, progress of group work, trend of results - was promptly made available to all those involved, including patients. Strong mission engagement and participatory governance are linked to multi-dimensional accountability practices. (MGA, Maticena, 2017).

5.2 The results

The comparison between the balance sheet and income statement for the year 2020 respectively compared to 2019 shows how the impact of the pandemic on Risana's economic performance has been significantly mitigated, if not neutralized; the decrease in the value of production has in fact stopped below 4%, against the average 13% of the dentistry sector, thanks to an increase of 25% in the number of clients. The extraordinary income from public interventions of economic and financial support made it possible to achieve a substantial balance in the budget (Table 2 and 3). The comparison of the value of the services produced and the turnover on a monthly level offers an even more immediate and effective reading of the speed of recovery implemented by Risana (Table 4).

TABLE 2 – Balance Sheet 2019-2020

	2020	2019
Receivables due from associates	-	750
Fixed assets	165.772	176.531
Current assets	207.526	135.845
Prepayments and accrued income	10.107	1.952
Assets	383.405	315.078
Provisions for risks and charges	-	-
Termination benefits provision	118.696	103.221
Current liabilities	109.471	76.728
Non-current liabilities	25.000	53.500
Accrued liabilities and deferred income	35.006	19.714
Liabilities	288.173	253.163
+ Owners' equity	96.918	57.933
Share capital	98.100	63.100
+ Profit / - Loss for the Period	- 1.686	3.982

TABLE 3 – Income statement 2019-2020

Revenues		780.097	811.414
	(comparison with the previous year)	-3,86%	
Operating expenses		- 806.680	- 804.801
Operating income		- 26.583	6.613
Financial income and expenses		- 512	- 893
Extraordinary income and expenses		25.409	-
Net Income Before Taxes		- 1.686	5.720
	(% of revenues)	-0,22%	0,70%
Taxes		-	- 1.738
Profit / Loss for the Period		- 1.686	3.982

TABLE 4 - Service produced and turnover per month, comparison 2019 and 2020

	2019		2020			
	Services	Turnover	Services	Rate	Turnover	Rate
January	64.902	61.759	67.992	5%	65.560	6%
February	68.733	65.634	71.465	4%	75.971	16%
March	62.432	64.740	22.595	-64%	27.076	-58%
April	63.508	67.410	12.354	-81%	9.336	-86%
May	75.042	77.936	45.082	-40%	45.440	-42%
June	72.093	68.483	67.494	-6%	65.848	-4%
July	67.190	72.288	92.621	38%	91.040	26%
August	37.782	40.715	55.720	47%	57.570	41%
September	61.306	57.739	73.774	20%	67.112	16%
October	82.765	77.367	86.461	4%	87.752	13%
November	76.185	75.841	90.283	19%	95.598	26%
December	61.631	78.952	69.259	12%	91.336	16%

Respecting the economic constraints is of course a necessary condition for the sustainability of the business. No less important for the Clinic was the possibility of continuing to offer those who turned to it a good quality service at the right price in conditions of maximum safety.

6 Conclusions

The first part of the question that motivated this work concerns the way in which the pandemic has affected the Risana Clinic. The survey conducted made it possible to collect significant information in this regard. Since this is an activity operating in the health sector, mainly the dental one, all the staff found themselves exposed to a potentially high-risk situation. In addition to the fear and psychological stress that inevitably arise, there are concerns about the negative effects induced by the containment measures

imposed by the government authorities: the data relating to the strong contraction in turnover in the months corresponding to the lockdown, a period in which the polyclinic was able to work only for emergencies. At the end of the same year, however, the decrease in turnover was almost completely recovered, and the economic support measures from which the business was able to benefit - by taking prompt action to obtain them - made it possible to close the year substantially in balance, with a better performance than that found in most SMEs and dental businesses, as we have seen. The business never stopped completely, and was able to operate safely, with all the PPE in accordance with the law - even before there was a law on the matter - without anyone getting sick.

The second part of the research question aimed to investigate the existence of specific key factors for resilience and sustainability. Considering the foregoing, we believe it is possible to conclude that the participatory leadership style, that Mintzberg defines "communityship", and the robust corporate culture built over time on the EoC values of gratuity, solidarity and reciprocity provided the company with such agility, resilience and proactivity that have allowed it to react promptly to the challenges of the pandemic epidemic, identifying and implementing the most effective strategies to put the business back in a sustainable state. Quoting Mintzberg: "organizations learn their way into interesting strategies through small ventures that arise from the initiatives of all sorts of people" (Mintzberg, 2009, p.143). We also find confirmed in this experience what the HM and the EoC underline about the importance of human capital, and in particular of relational capital: they are people, with their skills and abilities, with their availability and ability to work together, to make the difference. Investing in the human capital is today more than ever a winning choice. A further consideration is related to the importance of the purpose and its impact on motivation and choices. The Risana Clinic by vocation embraces a much broader purpose than the mere economic result, the mission is clear and endorsed by each of its members, moreover, according to what is typical in EoC businesses, the company staff stipulates a real Pact on the mission, renewed periodically (Argiolas 2014). The corporate mission thus assumes that function of North Star, capable of motivating and guiding choices and decisions even in difficult moments. All things being equal, the leadership style and the value matrix of the EoC at the base of the corporate culture has undoubtedly added value and created synergies with respect to the resources available at the Clinic, creating the conditions for the challenges to be overcome and the opportunities to be exploited. Ultimately, a vision of a person-centered enterprise seems to emerge from this experience (Gustavson, 2020), a possible place not only for the creation and sharing of

value, but also, according to the Humanistic Management theory (Melè, 2016), for human flowering and fulfillment.

Appendix

1. *Research protocol*

A) introduction	<p>Objectives: studying the impact of the Pandemic on Poliambulatorio Risana</p> <p>Auspices: finding strategic key-factors useful in successful crisis management</p> <p>Research questions: how has the Pandemic affected Poliambulatorio Risana? Are there specific cultural / managerial key-factors towards resilience and sustainability?</p> <p>Literature: Humanistic Management theory, Economy of Communion theory, MGA framework, Stakeholder theory, theoretical contributions about Pandemic and SME in Italy.</p>
B) Information collection procedure	<p>Identification of information sources, presentation of credentials, request for authorizations, timeline of the surveys (25.06.2021-06.09.2021), collecting methods: document analysis, questionnaires (87), semi-structured and in-depth interviews (35, total duration: 15h:11m:36s, 242 pages of transcript, direct observations (120h). Guidelines on researcher behaviour.</p>
C) Protocol questions	<p>Enterprises' description (history, mission, governance, strategy, accountability). Pandemic challenges and meaningful events. Company decisions / actions. Company performance. The role of the stakeholders. Post-Pandemic strategies.</p>
D) Report framework	<p>Data format: All paper documents have been transformed into PDF files; All voice notes (recorded interviews) have been carefully transcribed and signed. The numerical data were processed on excel files. All the documentation is registered catalogued as D (documents), E (data processing), I (interviews), O (direct observations), Q (questionnaires) and identified by a protocol number. The bibliography is listed at the bottom.</p>

2. *MGA: profit-making enterprise and social enterprise compared (Matacena, 2017)*

Subjects	Profit-making enterprise	Subjects	Social enterprise
Shareholders	<p>Mission</p> <p>Capitalist benefit, that is, the optimization of yield for shareholders while pursuing an economic optimum which is sustainable in the long term</p> <p><i>Unidimensional mission</i></p>	Individual and collective users	<p>Mission</p> <p>Collective benefit, that is, optimization of individual, group and/or collective benefits while respecting maintenance of the condition of entrepreneurship as constraint on the continuity of the specific mission</p> <p><i>Multidimensional mission</i></p>
Entrepreneur actor innovator	<p>Governance</p> <p>Coherent company governance with a finalistic objective, coherence gained by strong command principle made clear by a finalized hierarchical chain and realized through a coordinated directional behavior in relation to social and economic stakeholders</p> <p><i>Hierarchical governance</i></p>	Collective entrepreneur	<p>Governance</p> <p>Ultrademocratic corporate governance due to the presence, in strategic direction, of all the actors of the ethical business; ultrademocratic nature made possible by collective concerted directional behaviors in relation to economic and social stakeholders</p> <p><i>Multi-stakeholder governance</i></p>
Controller	<p>Accountability</p> <p>Internal information system useful for management separated from external information system which has the aim of producing documents with final data and values. This system is able to produce:</p> <ol style="list-style-type: none"> 1. Documents which conform to accounting obligations useful for entrepreneurship checking 2. Financial reporting useful for investors 3. Eventual socio- environmental reporting useful for stakeholders considered prevalent at that moment <p><i>Unidimensional accountability</i></p>	Controller	<p>Accountability</p> <p>Single information system from whence comes information able to give rise to systematic communication through which to check levels of entrepreneurship and mission pursued and achieved by way of control of the:</p> <ol style="list-style-type: none"> 1. Administrative results, useful for checking obligations deriving from the presence of eventual subsidy legislation 2. Managerial results, useful for checking constraint for entrepreneurship 3. Institutional results, useful for checking specific social performances and activating mechanisms of fundraising <p><i>Multidimensional accountability</i></p>

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What leads to SMEs continuity?

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Abstract

The purpose of this study is to investigate how resilience and entrepreneurial orientation may vary depending on the health state of companies, i.e., in an economic condition such as not having to initiate any alert procedure compared to c.d. sick companies, which have to trigger the alert procedure. To this end, the study has adopted an explorative approach. Empirical analysis has been carried out by using the AIDA database (Bureau Van Dijk—A Moody's Analytics Company), useful to identify the total population of manufacturing SMEs that has been divided into two samples (healthy companies vs. sick companies) through the use of indexes - about income, equity, and financial nature - developed by the National Council of Chartered Accountants (CNDCEC), as provided for by the Decree-Law of 12 January 14/2019. A questionnaire has been administered to the two samples to investigate the areas related to the entrepreneur's resilience and orientation. After data collection, a descriptive statistics analysis, a Student's t-test, and a Pearson correlation were performed. Findings show that when it comes to resilience (in terms of the ability to replace the losses encounter in life, to grow in positive ways by dealing with difficult situations, and to find out creative ways to overcome difficult situations); and, to entrepreneurial orientation (in terms of improvements in the products or services provided,

in the production processes, and in organizational innovation, and in terms of considering risk-taking as a positive attribute and being able to take initiative in every situation), the alleged state of crisis matter. On the contrary, when it comes to autonomy and competitive aggressiveness, the companies' health condition does not matter. Finally, results show a positive association between resilience and entrepreneurial orientation.

Keywords – The Code of Corporate Crisis and Insolvency, SMEs' continuity, resilience, entrepreneurial orientation

Paper type – Academic Research Paper

1 Introduction

The Legislative Decree N. 14/2019, known as the Code of Corporate Crisis and Insolvency and postponed in September 2021 due to the Covid-19 pandemic, was implemented to reform "the disciplines of the business crisis and insolvency", and to introduce an early warning system based on income, equity, and financial indicators, to stimulate companies to intervene on time, with a forward-looking perspective, on the emergence of the symptoms of a state of crisis, to prevent them from degenerating into a state of insolvency, in some cases irreversible. This regulatory framework underlines a strong sensitivity on the part of the legislator to the issue of the so-called early warning and the need for companies to implement a corporate information system capable of promptly and accurately reporting any deterioration in the company's performance in the years before the event of default. Therefore, the crisis is seen as a situation of difficulty that can be "temporary"; thereby, potentially reversible.

Notwithstanding the concept of crisis has been always a complex issue to deal with; especially because enterprises, in their life, may often experience periods of crisis, such as in the case of the recent COVID-19 outbreak, which has shaken the worldwide social, economic, political and health context; little attention has been devoted to the role of the entrepreneur in successfully overcome the crisis, especially when the entrepreneur acts dynamically and innovatively (Castro and Zermeño, 2020). Resilience can be considered one of the factors able to foster firms to face the threats (Meyer, 1982); especially because it represents firms' dynamic capability to face and overcome external challenges by reconfiguring their business models (Teece, 2018). This ability to face adversity depends on entrepreneurial orientation, which refers to

entrepreneurship in terms of innovativeness, autonomy, risk-taking, proactiveness, and competitive aggressiveness (Shan et al., 2015).

Accordingly, in the attempt to contribute to filling the aforementioned gaps the aim of this study is to investigate the entrepreneur's features in terms of resilience and entrepreneurial orientation that characterize firms that may declare a state of crisis, and therefore trigger the alert procedure, compared to healthy companies.

Therefore, the research questions are the following:

RQ1: *Are there differences between resilience and entrepreneurial orientation depending on the health state of firms?*

RQ2: *Is resilience associated with specific components of entrepreneurial orientation?*

The paper is organized as follows. The second section presents the theoretical framework regarding the role of the entrepreneurs in overcoming a state of crisis. The third section describes the adopted methodology. The fourth section describes the findings of the study, while the last section provides the discussion of the results and conclusions

2 Literature review

As mentioned by Duchek (2018), the advent of critical situations and the emergence of a state of crisis can be overcome and prevented with the entrepreneur's dynamic and innovative behaviors. The skills underlying this approach are proactivity, opportunity recognition, and exploitation, risk management, and resilience. Particularly, resilience, as the entrepreneur's ability to adapt and cope with turbulence and changes, is seen as one of the main factors able to timely promote recovery from the crisis (Bullough and Renko, 2013; Branicki et al., 2018; Duchek, 2018).

Castro and Zermeño (2020) have performed a systematic literature review to investigate the actions taken by entrepreneurs to manage the crisis and found out that the ability to respond to the disasters was related to the resilience factors. Resilience is made up of entrepreneur characteristics (in terms of a number of years in the business, previous experiences with crises, lifestyle, gender, ideological identity, and others), of type of relationships established with partners such as governmental and social institutions, of social and human capital, and, finally, of strategic management ability in terms of managers' or entrepreneurs' ability in identifying potential issues and of the speed in making decisions. Therefore, actions to tackle the crisis depend on these factors; which can drive a certain type of risk perception as well as attitudes toward strategies of

differentiation, diversification, adaptability, or of ability to anticipate a crisis, innovative learning, post-crisis strategies, etc.

More specifically, resilience is the result of the interaction between entrepreneurs and the reference environment; is a dynamic and evolving process through which entrepreneurs acquire knowledge, skills, and abilities to face the uncertain future with a positive, creative and optimistic attitude, relying on their own resources (Dyer and McGuinness, 1996). Resilience is a dynamic adaptation process that allows entrepreneurs to continue to look to the future despite the difficult market conditions and despite the not always favorable circumstances they are forced to face; it is the ability that an entrepreneur has to face and overcome particularly difficult situations. This ability to face adversity depends on the individual's resources, interaction with the environment, and companies *modus operandi* such as the entrepreneurial orientation.

Entrepreneurial orientation has been recognized as a key success factor for organizational performance (Cannavale et al., 2020) and it refers to a strategy-making process that characterizes entrepreneurship in terms of innovativeness, autonomy, risk-taking, proactiveness, and competitive aggressiveness (Shan et al., 2015). Especially in times of crisis, innovation as the firm's ability to engage in and support processes devoted to developing new ideas, novelty, and creativity solutions can increase the chances of companies' survival (Lumpkin and Dess, 1996). However, are the people working in the company, specifically the entrepreneur, which set up the base for the implementation of innovative processes (Kianto, Sáenz, & Aramburu, 2017); considering that human knowledge and attitude play a pivotal role in feeding innovation (Andreeva and Kianto, 2011).

When it comes to a firm's decision-making processes, autonomy assumes a key role. In fact, autonomy refers to the activities undertaken by a single person or group of people in performing their willingness in terms of ideas or vision. Specifically, in the organizational context, autonomy is represented by the ability of the management or the entrepreneur in acting and making decisions independently favoring companies' purposes (Shan et al., 2015). Based on firms' size, autonomy can vary. In small firms, where activities are characterized by a high level of centralization, the actions carried out by the entrepreneur benefit from a high level of autonomy (Miller, 1983); and this seems to increase the firm's ability to timely overcome organizational struggle and situations of crisis (Shan et al., 2015). On the contrary, as the company grows, autonomy is fostered by autonomy delegation processes to operative units which responsibly assume the power to pursue firms' goals and to solve problematic issues (Shan et al., 2015). Therefore, autonomy can lead to better performance and survival levels.

Risk-taking is defined as “the degree to which managers are willing to make large and risky resource commitments, that is, those which have a reasonable chance of costly failures” (Miller and Friesen, 1982, p. 923). This behavior leads to mobilizing huge resources to investments in current or new market opportunities and it presupposes a strong commitment by the entrepreneur in achieving expected outcomes and guaranteeing firms' continuity (Shan et al., 2015). The management commitment also promotes an adequate provision of financial and human resources useful for the achievement of the firm's performance (Javalgi and Todd, 2011). Even in this case, the role of human capital, particularly the entrepreneur and the management, can determine the attitude in overcoming a state of crisis.

According to Shan et al. (2015, p.685) proactiveness refers to “firms that have the will to be a leader and the foresight to seize new opportunities, even if they are not always the first to enter the market”. This definition implies that the ability to foresight new business opportunities is related to the way firms relate to the recognition and exploitation of opportunities. It is fundamental for the entrepreneur or the management to be "alert to potential business opportunities, actively searching for them” and to be ready to acquire "appropriate human resources, gathering financial resources, and setting up the organization"(Kuckertz et al., 2017, p. 92).

Finally, competitive aggressiveness is defined as the firms' ability to face competitors' challenges in a responsive way; by stimulating the management to engage in activities aimed at overcoming their rivals, even with unconventional methods devoted to aggressively focusing on competitors' weaknesses (Shan et al., 2015).

3 Methodology

3.1 Data collection and sample

This research represents the first step of a study aiming to investigate the differences between resilience and entrepreneurial orientation depending on the health state of firms. The data were collected from the AIDA database (Bureau Van Dijk–A Moody’s Analytics Company), used to identify the total population of 1093 Italian manufacturing SMEs located in the Marche region. This region is characterized by a production model focused on the industrial districts and manufacturing sector, which has particularly suffered from the crisis that occurred by the advent of the Covid-19 pandemic and the subsequent lockdowns that stopped the activity of companies that did not operate in sectors considered essential (Istat, 2021). This is even more important if considering that the employment rate in manufacturing is the highest nationwide and it represents one of the territorial excellences.

Moreover, data confirmed that the manufacturing sector represents the main driver to an economic restart based on international markets and reviving employment (Istat, 2021).

To identify the small and medium-sized companies we adopted the European Recommendation n. 2003/361/CE, based on the data balance sheet of 2019. A questionnaire was administrated by email to investigate entrepreneurial orientation and resilience.

A final dataset of 144 questionnaires was collected, yielding a response rate of 13%; subsequently, it has been divided into two groups through the use of indicators, of income, equity, and financial nature, developed by the National Council of Chartered Accountants (CNDCEC), as provided for by the Decree-Law of 12 January 14/2019, to identify firms that might declare a state of crisis, and therefore trigger the alert procedure, compared to c.d. healthy companies. The sample consists of 58 SMEs that potentially are in a state of crisis, and of 87 SMEs which can be considered healthy companies.

3.2 Measures

We built the survey by using scales previously corroborated in the entrepreneurship literature, as shown in table 1. Therefore, we decided to measure entrepreneurial orientation by adopting a scale developed by Shan et al. (2015); and to measure resilience by adopting a scale developed by Sinclair and Wallstone (2004). All items used to measure the constructs were seven-point Likert-type scales. Finally, business continuity has been measured as a dummy variable that takes the value 1 if the enterprise belongs to c.d. healthy companies, otherwise 0. This variable has been categorized according to Article 13 of the Italian Code of Corporate Crisis and Insolvency regarding the crisis indices.

Table 1. The questionnaire designs

Resilience	Description
RESI1	I actively look for ways to replace the losses I encounter in life
RESI2	I believe that I can grow in positive ways by dealing with difficult situations
RESI3	I look for creative ways to alter difficult situations

RESI4 Regardless of what happens to me, I believe I can control my reaction to it

Innovativeness

INN1 We actively introduce improvements in the products or services provided

INN2 We actively introduce improvements in the production processes

INN3 We actively introduce improvements in organizational innovation

INN4 We actively introduce improvements in marketing innovation

INN5 We actively introduce improvements in the business model

Autonomy

AUTO1 Employees are permitted to act and think without interference

AUTO2 Employees perform jobs that allow them to make and instigate changes in the way they perform their work tasks.

AUTO3 Employees are given freedom to communicate without interference.

AUTO4 Employees have access to all vital information

Risk-taking

RISKTAK1 The term “risk taker” is considered a positive attribute for people in our business.

RISKTAK2 Our business emphasizes both exploration and experimentation for opportunities.

RISKTAK3 People in our business are encouraged to take calculated risks with new ideas.

Proactiveness

PROACT1 We always try to take the initiative in every situation

PROACT2	We excel at identifying opportunities
PROACT3	We initiate actions to which other organizations respond

Competitive aggressiveness

COMPAGRE1	Our business is intensely competitive.
COMPAGRE2	In general, our business takes a bold or aggressive approach when competing
COMPAGRE3	We try to undo and out-manuever the competition as best as we can

3.3 Analysis

To answer our research questions, we followed two steps. First, we performed a descriptive statistical analysis and a Student’s t-test to verify whether there are differences between resilience and entrepreneurial orientation depending on the health state of companies. Second, we carried out a Pearson correlation to investigate the positive or negative association between resilience and entrepreneurial orientation.

4 Findings

4.1 The descriptive statistics

In order to answer the following research question - *Are there differences between resilience and entrepreneurial orientation depending on the health state of firms?* – descriptive statistical analysis and a Student’s t-test to verify whether there are differences between resilience and entrepreneurial orientation depending on business continuity.

Table 2 shows the descriptive statistics for resilience and entrepreneurial orientation depending on business continuity.

Table 2. The descriptive statistics

	Healthy companies N= 87				Sick companies N= 58			
	Mean	Std. Dev	Min	Max	Mean	Std. Dev	Min	Max
Resilience								
RESI1	6,149	1,136	2	7	5,275	1,542	2	7
RESI2	5,816	1,215	2	7	5,120	1,545	2	7
RESI3	5,678	1,359	2	7	5,068	1,531	2	7
RESI4	5,356	1,517	1	7	5,310	1,453	2	7
Innovativeness								
INN1	5,425	1,317	1	7	4,741	1,383	2	7
INN2	5,229	1,318	2	7	4,534	1,591	1	7
INN3	5,229	1,428	1	7	4,310	1,524	1	7
INN4	4,666	1,743	1	7	4,362	1,471	1	7
INN5	4,747	1,636	1	7	4,275	1,619	1	7
Autonomy								
AUTO1	4,655	1,790	1	7	3,948	1,538	1	7
AUTO2	4,413	1,839	1	7	4,103	1,518	1	7
AUTO3	5,620	1,448	1	7	5,137	1,721	1	7
AUTO4	5,310	1,594	1	7	4,810	1,627	2	7
Risk-taking								
RISKTAK1	4,827	1,643	1	7	4,224	1,545	1	7
RISKTAK2	4,735	1,602	1	7	4,310	1,718	1	7
RISKTAK3	4,321	1,807	1	7	4,017	1,752	1	7
Proactiveness								
PROACT1	5,344	1,396	1	7	4,810	1,594	1	7
PROACT2	5,080	1,424	1	7	4,534	1,465	2	7
PROACT3	4,413	1,807	1	7	4,189	1,515	1	7
Competitive aggressiveness								
COMPAGRE1	4,540	1,648	1	7	4,137	1,382	1	7
COMPAGRE2	4,540	1,717	1	7	4,103	1,529	1	7
COMPAGRE3	4,988	1,653	1	7	4,741	1,370	2	7

Through the Student's t-test, we discovered differences in resilience and entrepreneurial orientation, depending on the alleged state of crisis.

Entrepreneurs running healthy companies seem to be more resilient than entrepreneurs who might declare a state of crisis. Findings reveal differences in terms of the ability to replace the losses the entrepreneur encounter in life (p value=0.000), to grow in positive ways by dealing with difficult situations (p value=0.003), and to find out creative ways to overcome difficult situations (p value=0.013).

With regards to entrepreneurial orientation, when it comes to innovativeness, being a healthy company matter. Findings reveal differences in terms of improvements in the products or services provided (p value=0.003), in the production processes (p value=0.005), and in organizational innovation (p value=0.003) depending on the alleged state of crisis. In fact, whether the firm belongs to the group of healthy companies, seems to have better innovation ability compared to firms belonging to the group of sick companies.

Moreover, when it comes to risk-taking, as a positive attribute for people working within the company (p value=0.028), being a healthy company matter. This implies that for a healthy company, employees or collaborators able to assume the risk of their actions represent a value-added.

In addition, when it comes to being proactive, as trying to take the initiative in every situation (p value=0.035), the alleged state of crisis counts. In fact, companies that might declare a state of crisis seem to be less proactive than healthy companies.

On the contrary, when it comes to entrepreneurial orientation in terms of autonomy and competitive aggressiveness, the alleged state of crisis does not matter. In fact, findings do not reveal differences in the activities undertaken by a single person or group of people in performing their willingness in terms of ideas or vision; and in the firms' ability to face competitors' challenges in a responsive way, depending on the state of health of the company.

4.2 The correlation between resilience and entrepreneurial orientation

In order to answer the following research question - *Is resilience associated with specific components of entrepreneurial orientation?* – Pearson's correlations were employed to investigate the positive or negative association between resilience and innovativeness, autonomy, risk-taking, proactiveness, and competitive aggressiveness.

The components of entrepreneurial orientation have been aggregated by exploratory factor analysis (EFA). In table 3, we have provided the results of the Cronbach alpha and the Kaiser-Meyer-Olkin (KMO) tests to ensure a

high level of internal consistency and sampling adequacy. All values respect the thresholds commonly accepted in the literature.

Table 3. KMO and Cronbach Tests

Construct	KMO	Cronbach alpha
Resilience	0.741	0.840
Innovativeness	0.756	0.877
Autonomy	0.743	0.898
Risk-taking	0.719	0.862
Proactiveness	0.705	0.853
Competitive aggressiveness	0.728	0.908

Table 4 shows the significant Pearson's correlation values between resilience and entrepreneurial orientation. Findings show that resilience is positively associated with innovativeness (0.634*), autonomy (0.511*), risk-taking (0.651*), proactiveness (0.531*), and competitive aggressiveness (0.534*). Thus, there is a positive association between resilience and entrepreneurial orientation.

Table 4. The Pearson's correlation matrix between resilience and entrepreneurial orientation

	Resilience
Innovativeness	0.634*
Autonomy	0.511*
Risk-taking	0.651*
Proactiveness	0.531*
Competitive aggressiveness	0.543*

*, ** significant at 0.05 and 0.01 levels (two-tailed test), respectively

5 Conclusion

This study aims to investigate resilience and entrepreneurial orientation differences as some of the main entrepreneurial characteristics able to help companies in avoiding a state of crisis; to understand if and how these characteristics differ from companies in a state of crisis to a state of health.

Through the descriptive statistical analysis and the Student's t-test, we discovered that when it comes to resilience (in terms of the ability to replace the losses encounter in life, to grow in positive ways by dealing with difficult situations, and to find out creative ways to overcome difficult situations); and, to entrepreneurial orientation (in terms of improvements in the products or services provided, in the production processes, and organizational innovation, and in terms of considering risk-taking as a positive attribute and being able to take initiative in every situation), the state of health does matter. On the contrary, when it comes to autonomy and competitive aggressiveness, the companies' health condition does not matter.

These results imply that successful entrepreneurs set their business goals and make timely decisions to achieve them in increasingly uncertain and competitive environments. The information available to them is often ambiguous, incomplete, or constantly evolving: in these circumstances, resilient entrepreneurs, who show a high degree of tolerance for ambiguity, rapid adaptation to change, and creativity, may be better prepared to have success. Therefore, resilience can be considered as a key element to face and overcome the crisis in a successful way or to maintain the status of a healthy company. However, at a company level, it is good to consider resilience as a collective quality. In fact, growing the personal resilience of companies members, empowering and educating managers and entrepreneurs to increase this quality in their work teams, means educating, creating, and strengthening the degree of organizational resilience of their own company, making it a resilient company, that is, able to be strong and flexible in the face of market threats and turbulence. Thus, resilience is the basis for developing the optimal conditions for reporting and communicating critical events and taking positive action on all those aspects that allow the organization to work effectively over time. Being resilient should become a goal for each organization that wants to pursue sustainable growth, by avoiding potential states of crisis.

Moreover, this resilient attitude should be nourished by the entrepreneurial orientation as the predisposition of managers and business executives to support and encourage the emergence of business ideas and a greater ability to react and risk taking in every situation. This is even more important if we consider that entrepreneurial orientation is a fundamental indicator of the company's state of health. An effective strategic decision-making process in terms of innovativeness, proactiveness, and risk-taking, combined with the identification and enhancement of the skills of the company members, can lead to avoiding a state of crisis and promote a state of company well-being.

This paper contributes to the extant literature in many ways. Firstly, it examines, for the first time, how the impact of resilience and entrepreneurial orientation on the SMEs' ability can vary depending on a company's state of health or crisis. Second, it shows a strong and positive association between resilience and entrepreneur orientation. Lastly, it gives insights into the role of entrepreneurs' resilience and orientation in Italian manufacturing SMEs, considering the forthcoming introduction of the Legislative Decree N. 14/2019.

Several limitations should be mentioned and may offer avenues for future research. The main limitation is related to the restricted sample size, which means that the generalisability of the results is limited to developing contexts in which the data were collected. Therefore, we would like to increase the response rate to wider the sample and replicate the analysis across other Italian regions, to find possible variations.

Second, this study is based on a quantitative approach performed to have only an explorative description of resilience, entrepreneurial orientation, and business continuity. Thus, future research could take an in-depth look at the drivers of resilience and entrepreneurial orientation that could help companies in avoiding a state of crisis and provide the path to overcome complex circumstances, by stimulating processes devoted to finding out alternative solutions and new business opportunities.

Third, this study has investigated only how resilience and entrepreneurial orientation can vary depending on the alleged state of crisis; and the positive association amongst these components. However, building on existing research, further research could investigate the relationship between entrepreneur resilience and firms' continuity and how this link could be reinforced by the moderating or mediating and positive effect of entrepreneur orientation.

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From Skin Care to Health Care: Female entrepreneurship, profitability and humanistic management in Veralab case

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Abstract

This work aims to highlight how distinctive features of Humanistic Management and Entrepreneurship can be pursued in SMEs, enhancing female entrepreneurship role and contributing to overcome economic crisis such as the one caused by the Covid-19 pandemic. The study presents an enquiry into how increasing profitability and fostering dignity and health safety in workplace can be simultaneously pursued by adopting an entrepreneurial vision belonging to the humanistic management approach. Consequences of Covid-19 outbreak and its containment lockdown measures has been hitting hard on SMEs and Italian economy. Unlike previous economic crisis, female work has been especially affected. Against this scenario, Veralab Re-Forme Srl has reached wide popularity thanks to its unprecedented good economic results during the pandemic year 2020 (among the “champions” according to ItalyPost study center) and the virtue-based business model pursued by its owner and founder Cristina Fogazzi resting on intangible

variables that are at stake within entrepreneurial vision and goals. Drawing from the analysis of the case-study the role of humanistic values adopted by the entrepreneur are thus discussed to assess the relationship between good economic performance and covid-containment best practices and point out how the humanistic features of the business model have impacted on the firm's success in troubled times.

Keywords – FemaleEntrepreneurship, IntangibleValues, HumanisticManagement, SmallBusiness, Covid19

Paper type – Academic Research Paper

1 Introduction

This work aims to shed new light on how Small and Medium-sized Enterprises (SMEs) entrepreneurial values and features of humanistic female entrepreneurship can help not only in surviving economic crisis but also in being successful both in increasing profitability and adopting good practices concerning dignity of work (Schlag & Melé 2020). In particular, the present enquiry analyzes and explains how the Re-Forme Srl – Veralab case study shows features of an economy of care amidst Covid- 19 pandemic (Gatzia, 2011). Indeed, the role of its founder and owner, is tackled by discussing features of female entrepreneurship, previous non-entrepreneurial life-experiences, her civic and community-based values, as well as features of her personal reputation. These humanistic-driven values are discussed in order to assess the relationship between an unprecedented good economic performance for the company during the pandemic and covid-containment best practices adopted.

The case study is chosen as an experience of success to be analyzed against a background of unfavorable conditions for most of SMEs during the pandemic. Consequences of Covid-19 outbreak and its containment lockdown measures has been hitting hard on SMEs and, due to the high number of infection waves and raising uncertainty towards the future, on Italian economy (Giorgio & Carnazza 2020). Unlike other economic crisis (Alon, Doepke, et Al. 2020), female work has been especially severely affected (Brunetti, Corsini, Martelli 2021; Hai-Anh H. Dang, Cuong Viet Nguyen 2021; Vigorelli 2019). Against these scenarios, the work highlights how Re-Forme Srl, led by Cristina Fogazzi, a case of passion-driven entrepreneur (Pagano, Petrucci, Bocconcelli 2020), doubled the number of

its employees (49 out of 53 being female workers) and tripled its revenue during 2020 while registering zero Covid-19 infections among its work force.

The case represents an example of a business that was able to manage the crisis in a successful way and, unlike most of the firms, was able to continue creating value for local communities, customers and employees leveraging on opportunities brought up by the pandemic, such as the intensification of online contacts. Cristina Fogazzi, by ensuring high profitability, intensifying already established practices of environmental sustainability and enhancing the reach of the engagement of her personality in active citizenship, represents a successful case of shared value creation. The present work analyzes and explains how, by applying the “Humanistic Management Integrated Model” (Spitzeck 2011) it is possible to understand the behavior of the company resting on both moral and economic motives in coping with Covid-19 crisis, as well as to outline key factors of growth and assessing how the humanistic features of Cristina Fogazzi’s business model have impacted on the firm’s success in troubled times.

The remainder of the paper is organized as follows. Section 2 provides a literature review on SMEs and crisis and the Humanistic management approach, while section 3 depicts the theoretical framework underpinning the empirical research. Section 4 introduces the methodology and the research design, followed by the case analysis (section 5); data collection, and main findings are described and discussed. In the final section, the theoretical and practical implications are presented, along with limitations and future research directions.

2 Literature background

2.1. Small Business Facing the Pandemic Crisis

SMEs play a key role in the development of European territory: they represent the main source of occupation (SME annual report 2019; Cerved 2020; ISTAT 2021) and are considered the first authors of innovation activities in the local contexts (Gilmore et al., 2013; Labudová & Jánošová, 2019; Mina et al., 2016) contributing to the development of the entrepreneurial spirit of a region (Staniewski et al., 2015; Del Baldo & Demartini 2016; Del Baldo & Maticena, 2009; Del Baldo, 2012); it is precisely the ability to be innovative at the basis of their continuous competitiveness (Juergensen et al., 2020). Against the European landscape, Italy holds a specific place in the debate on SMEs and Innovation capabilities (Hall, Lotti, & Mairesse, 2009.) as well as specific criticalities (Carletti, Oliviero, Pagano et Al. 2020; Confindustria 2020). This key role

is guaranteed by some firm-specific characteristics of SMEs: they have a flexible and simple structure (Juergensen et al., 2020; Blažková, 2016; Coltorti, Resciniti, et al. 2013).

The role of the entrepreneur is central in the development of all the activities and in the capacity to exploit the available resources in an efficient way (Pencarelli et al., 2020; Blažková 2016). The flexibility is provided also by the relatively flat hierarchical structure that makes processes faster and more adaptable to unforeseen market changes than bigger companies (Juergensen et al., 2020; Blažková, 2016; Pencarelli et al., 2021). Furthermore, SMEs can exploit external networks more efficiently, which favours the exchange of knowledge (Narula, 2004; Aureli, Ciambotti, Del Baldo 2011). At the same time, SMEs must face some internal constraints above all linked to the limited availability of resources (financial and non-financial) and lower resilience linked to their size (Juergensen et al., 2020; Narula, 2004; OECD, 2020). SMEs are generally characterized by structural fragility due to the lack of financial, technological, and operational resources, as well as the lack of a long-term strategic planning (Pencarelli, 2021). It is above all the financial aspect, and therefore the lack of liquidity and resources (Juergensen et al., 2020), which makes them particularly vulnerable to the increasing competition and overall, in situations of external shocks, such as the pandemic emergency. The Covid-19 emergency has deeply affected different aspects of society and economy but has mainly affected the most fragile organizations such as SMEs, representing perhaps one of the greatest challenges that most small businesses have faced. Situations such as the pandemic cause major changes in the market and in people's lifestyle (Liguori et al., 2020; World Economic Forum, 2020); World Health Organization - WHO, 2020). This pandemic represents an outward shudder of unprecedented significance, affecting European SMEs on both the demand and supply sides (Juergensen et al., 2020).

Although not all types of companies and sectors have been equally affected (Pencarelli, 2021; Juergensen, et al., 2020) there are some effects that have been identified in the most recent literature available on the topic. Some recent studies on the effects of the pandemic have in fact highlighted how it has directly jeopardized the survival capacity of the companies themselves (Liguori et al., 2020; Pencarelli, 2021; Rapaccini, Saccani et al., 2020; Dua, Ellingrud et al., 2020) as well as the birth of new companies (Pencarelli, 2021). Situations such as this impact, at company level, the availability of liquidity and profitability and undermines the employment levels of companies due to the total or partial suspension of the activities, as well as the various regulations that have put a strain on company sales (Pencarelli 2021). As highlighted by Juergensen, et al. (2020) who

distinguished the effects in the short and long term and on the types of companies, besides the financial problems, the SMEs mainly have faced logistical issues, as well as disruptions in demand, even though the severity was different among sectors of specialization. Furthermore, SMEs have had to incur expenses for the introduction of special laboratories and equipments, especially the companies that have temporarily re-adapted their operations in towards the production of goods needed during the pandemic, i.e. face masks and other medical equipments (Juergensen et al., 2020). The long-term effects can be traced back to the need to introduce or improve the digital infrastructures available to them, devoted much attention to the employee training. Furthermore, the changes in the supply chain have also led to the need to reorganize internally and in the long-term investing in new technologies and automation to improve their production processes to improve their efficiency (Juergensen, et al., 2020). From a managerial point of view, digitalization offers new opportunities to businesses and the crisis associated with the Covid-19 pandemic have had a central role in accelerating the responsiveness of SMEs to exploit the new trends, such as the transition towards environmental sustainability (Juergensen et al., 2020).

In general, there is a widespread consensus among scholars and policy makers on the ability of SMEs to face and react to macro-economic shocks showing an extraordinary capacity for resilience (Corbetta & Quadrato, 2020; Del Baldo, 2013; Del Baldo, 2017). In the case of the Covid pandemic, despite the unfavourable condition, some SMEs were able to envision opportunities connected to the pandemic, mostly appealing to existing strong company values and reducing the distance with the customers through online channels (Liguori & Pittz, 2020). Many companies have in fact been able to seize the opportunities, especially those related to technological transformation and therefore especially in sectors with a high technological component, proposing new innovative solutions in line with the new emerging needs and renew (Pencarelli et al., 2021). Other actors, present only with physical stores, have started their online activities, creating their own websites and implementing their presence on social networks (Pencarelli et al., 2021). Other companies have temporarily re-converted their production, and this is the case, as before mentioned, of the companies that have adapted their production to the new needs generated by the pandemic (Juergensen, et al. 2020; Pencarelli et al., 2021). The studies are moving to understand which are the factors that helped the SMEs to overcome the crisis and also seize the various opportunities that derive from it. The key success factors for companies are mainly attributable to the timing of reaction to the crisis and to the decision-making speed and flexibility in implementing all the security measures of company activities

(also with the help of setting up crisis units, cooperation). Furthermore, another factor is linked to the role of the entrepreneurs and their attitude to involve their collaborators (Corbetta & Quadrato, 2020). The studies in this sense are still limited, but there is a growing consciousness on the importance of understanding how SMEs have moved to deal with the new economic crisis triggered by the health emergency in order to understand also the changes that are interesting the small businesses all over the world (Corbetta & Quadrato, 2020; Conz & Magnani, 2020; Jung, Hwang, & Kim, 2018).

2.2. Humanistic Management in Pandemic Times

SMEs point of strength and weakness in creating value can be analyzed through different points of views. This work proposes as a theoretical framework the standpoint of Humanistic Management and Entrepreneurship (HME). HME represents a recent field (Melé, 2013), developed within Business Ethics, with the aim to provide both a normative paradigm on the distinctive features of the humane enterprise (Pirson, 2010; Laszlo, 2019) and a positive paradigm able to collect insights from the transition from the current form of capitalism to humanism in business (Steinvorth, Largacha-Martinez & Dierksmeier, 2014; Del Baldo, 2017).

Aiming to grasp mechanisms of harmonization between self-interest and concern for the common good (Zamagni, Acocella, Roncaglia, & Pizzuti, 1999), as well as able to evaluate the influence of non-strictly related economic variables on economic actions and actors, HME provides a unique insight into intangible variables at stake within entrepreneurial vision and goals, such as: spirituality (Bouckaert, & Zsolnai, 2012), issues of dignity (Pirson, 2017), human full development (Schlag & Melé, 2020), and civic and democratic engagement (Mollner, 2011), personal values and beliefs of the entrepreneur (Del Baldo, 2020). In the last two decades Humanistic Management, together and within the reflection on Humane Enterprise (Song & Kim, 2018), has collected a significant number of studies focusing on business models and entrepreneurial visions keen on more sustainable, socially oriented and values-based practice of doing business. Both as a way to face “grand challenges” of our time (Waddock, 2020; Eisenhardt, Graebner, & Sonenshein, 2016) and as a comprehensive vision of person-centered organizations (Melé, 2013). Due to its feature of “economy serving life”, HME is presented as a field of study suitable to seek to monitor and contribute to the meeting of the UN 2015 SDGs objectives, with its own peculiar ability to confront social consequences and impact of economic downturns, such as the one followed to the 2008 Great Recession, rising inequality, climate change (Schlag & Melé, 2020) and, recently, Covid-19

pandemic. Although similar insights had circulated before, only in the last fifteen years, with growing academic impact, HME has acquired sufficient scholarly coherence, a significant number of contributions and has reached so wide an audience to be considered a reliable theoretical framework with a distinctive perspective (Schlag & Melé, 2020). Given its status of a paradigm in the making, this perspective is subject to a continuous stream of research aimed to detail and discuss its main features (Steinvorth et al., 2014) and to provide additional formalization to its framework. (Von Kimakowitz, Pirson, et al., 2010).

In order to pursue this vision, HME develops coherent frameworks able to explain motivations and consequences of humanistic oriented business behavior and to provide business models based on the understanding of the economic sphere as being embedded within meaningful horizons that would otherwise escape economic explanation. Therefore, it addresses the impact of concerns for what is considered “higher” than the mere profit dimension of doing business, such as: beliefs in transcendence and religious values, as well as profane ideas of greater good, commitment to promote and share culture and art, political ideas concerning civil rights and the quality of democracy, that constitute significant part of individuals and communities’ life while doing business (Bouckaert, & Zsolnai, 2012). It addresses concerns for integral ecology (Jakobsen, & Zsolnai, 2017) and local communities (Del Baldo, 2018; Del Baldo, 2020), thus evaluating the relation of business with what is “surrounding” the dimension of production and profit-making. In the same manner, it addresses concerns for what is “below” the entrepreneurial and managerial level, by focusing on proposals and solutions for bettering working conditions and preserving dignity in workplace, also linking the issue to participation, cooperation and workers’ involvement in the goals of the firm (Pirson, 2017; Mollner, 2011).

Based on evidence that nor the profitability argument alone nor the moral concern taken on its own are able to explain the responsible behavior of the firm (Spitzeck, 2011), HME has developed a theoretical understanding of the variety of values-based motivations and goals that can be pursued, by adopting a multidisciplinary approach. HME engages in the discussion of variables that rest within the area of overlap in between economy and society, by proposing the merging of non-economic knowledge with the economic discipline (Greenhalgh, Allen, & Nesteruk, 2020). Moreover, as a result of the growing interest in Humanistic Management both at a theoretical level and as a set of good practices analyzed through empirical evidence, the Humanistic Management Network has been created to provide international and organized support to the development, discussion and dissemination of this perspective (Spitzeck et al., 2009).

With the spreading of the Covid 19 pandemic, the issue of the economy of care (on the concept of care see: Razavi, 2007; Folbre, 2006), as well as of wellbeing economics (Waddock, 2021) and the social role of the enterprise in being responsible for public health and social cohesion (Miller, Tang et al., 2021; Branicki, 2020), which have always been part of the humanistic management topics of interest, have been at the heart of the reflection of business ethics scholars from a variety of different perspectives. Starting from a more “traditional” CSR perspective, debate has spread on how ethical behavior impacted on marketing strategies during times of crisis (He & Harris, 2020) as well as on the need, highlighted by the crisis, to overcome narrow conceptualization of CSR and look at the enterprise as a social actor embedded within a universe of social relations. Particularly relevant for the latter idea is the acknowledgment by leading scholars of the opportunity to overcome previous versions of CSR theorization: One could argue therefore that, going forward, the instrumental version of CSR that dominated management scholarship is largely unfit for purpose (Scherer & Palazzo, 2011), or even dead (Fleming & Jones, 2012). Covid-19 rather points to the fact that we need to explore how different systems of capitalism across the globe have prepared for and dealt with the challenges of the pandemic, and what role for business responsibility is allocated in these systems to address social demands and the needs of wider society. (Crane, & Matten, 2020).

This perspective had indeed been circulating, before the Covid-19 challenge, among scholars involved in humane enterprise and humanistic management research (Spitzeck, 2011; Bruni & Sena, 2013; Chatterji, 2017; Light & Dana, 2020), while Covid-19 has represented a further stimulus to pursue a path of research able to bridge managerial and entrepreneurial studies with ethical and moral considerations pertaining to the firm as an embedded social actor creating intangible values and not only economic value (Piperopolous, 2010). In this vein, the impact of the pandemic on business behavior and business response to it can be analyzed in the context of a more ambitious enquiry on how changes brought by the pandemic contingency can be useful to foster change in the way business is conducted, as well as on how sensibility towards social challenges posed by the pandemic can be a driver of a more humane-person centered way of doing business which can be persistent beyond the crisis contingency (Kong & Belinkin, 2021; Pirson, Dessi et al., 2021; Bruni, 2021; Meda, Ferreras, & Battilana, 2020).

3 Methodology

Within the theoretical framework of Humanistic Management and Entrepreneurship (Pirson, 2017; Schlag & Melé, 2020) the present work contributes to the existing literature by adding a case study (von Kimakowitz et al., 2011; Del Baldo, 2020; Del Baldo, 2021; Del Baldo, 2009) and to HME studies with a case of female entrepreneurship and prevalently female employment.

In order to assess whether the case of Veralab can be understood as a case of Humanistic Management and how this feature played a role in its success during the pandemic years 2020-2021, it is analyzed with regard to each of the defining features of the paradigm (see paragraph 5). Nonetheless, the current work, although tackling all dimensions, highlights and focuses on especially the first and the last, in order to grasp the link between the firm's success in time of pandemic crisis while ensuring employees health care, employees' loyalty and job satisfaction.

The research has been developed through a qualitative approach, using an instrumental singular case study (Naumes, 2006; Yin, 1994; Miles, Huberman, & Saldaña, 2014) to better understand the reasons behind the success of this business during the pandemic situation, in opposition with the general trends that see the SMEs as the most affected by the emergency. The case study is chosen as it provides an holistic and in-depth way to investigate a particular area of interest of the phenomenon (Leedy & Ormrod, 2005; Feagin et al., 1991).

The inductive method is coherent with tackling grand challenges (Eisenhardt, Graebner & Sonenshein, 2016; Waddock, 2020), as well as providing in-depth enquiry. Indeed, coherence between theoretical framework, epistemological premises (Laszlo, 2019) and object of the study is pursued (Spitzeck, 2011).

While the present work presents an analysis of secondary sources, further enquiry will be conducted as follows: data on turnover, number of employees, social capital and other relevant information concerning financial and economic performance of the firm have been collected using Atoka database which collects detailed information of Italian enterprises.

In-depth interviews with the entrepreneur, as well as with key informant people (Halinen & Törnroos, 2005) among employees involved in the process of growth and evolution of the firm, will be further conducted by providing extensive analysis of the single case study.

5 Findings

When, in March 2020, the Covid-19 emergency hit Italy and particularly the Northern region of the country, where Fogazzi lives and most of the firm activities are based, her reputation was already on the rise and the

multichannel strategy was established. Nonetheless, the first national lockdown (from March to May 2020) has seen a doubling in Veralab business volume, bringing the contextual need to scale up selling capabilities.

In that period, while social capital (euro 20.000) has remained the same up until now, the business has seen a significant growth in volume and number of customers, (see Table 1), although part of it has been suspended by government restriction due to necessities of pandemic containment, as well as without receiving any public financing for endangered sectors by lockdown measures. This is consistent with Atoka indicator for assessing the impact of negative events on enterprises which reports: minimum as the level of impact on Re Forme s.r.l.

Table 1. Re-form Turnover and n. of employees (Source: Atoka.com)

Year	Turnover (€)	Employees (n.)
2016	585.000	-
2017	1.300.000	19
2018	5.700.000	22
2019	22.000.000	31
2020	48.300.000	38

As part of the reason why lockdown measures have not impacted significantly on Veralab performance is to be found in its already established ability to satisfy customers with online service and ecommerce, as well as the increased use of social media and online platforms due to the extraordinary condition of people being forced to stay home, that alone cannot explain the sudden rise in the number of orders and purchase that invested Veralab.

As Miller, Tang et al. have underlined, one of the key issues to be understood in assessing firms' behavior during the pandemic contingency is to understand whether their responsible behavior has been associated (and/or has been a driver) of "responsible citizenship" as well (Miller, Tang et al., 2021). Indeed, throughout all the pandemic hardest months, Fogazzi's communication has been highly committed to the issue of public health safeguard, to raising awareness concerning Covid-19 dangers, to promoting active citizenship engagement in volunteering for people in need and promoting philanthropic initiatives for donating to hospitals facing shortage of resources. While adopting containment measure plan for her employees, by involving a virologist in its design and implementation, she decided to provide workers with extra protections to the ones required by law and

national government directives. Insofar she succeeded in both building the profile of an active citizen caring for common good and social cohesion as well as in caring for employees and thus avoiding disaffection and fear that might spread from the emergency situation (Branicki, 2020; Kong & Belink, 2021).

The main elements of Veralab success amidst the pandemic can be found in those values that already have represented the main points of strengths before the pandemic outbreak (such as: credibility, trust, authenticity, dignity in work). At the same time Covid-19 offered unprecedented opportunities of expansion for businesses that already had a strong investment on ecommerce and online communication, such as Veralab. Moreover, Fogazzi addresses as a key ingredient of her success during the lockdown of March to May 2020 the fact that people had more time to care about their bodies and therefore to buy her products; nonetheless the idea that, particularly in times of global downturns, clients are more accurate in choosing what to buy depending on moral values and ethical standards of the entrepreneur and the brand considered, is also a key issue tackled by Fogazzi and used to explain her success.

Challenges posed by Covid-19 have been relevant but, following Fogazzi's considerations, affected only some minor aspects of her business: as a young firm setup between 2015 and 2016, 2020 would have anyhow represented a challenge for the reorganization of the business as it was expanding at a fast pace, therefore the outbreak only represented an additional issue in the reorganization to be dealt with but not the main one. Regulations on Covid-19 have slowed down the pace of expansion of the retail network, such as the Veralab second store opening in Rome in Spring 2021, as well as posing an additional challenge to the idea of internationalization of the business, but retail has always been considered by Fogazzi a minor part of her business, as well as considering foreign markets a viable option but not one to be urgently tackled. Covid-19 pandemic and consequent crisis did not affect the most serious challenges faced by Veralab in terms of positioning and expansion of the brand, such as resistance from the beauty sector towards the entrepreneur's personal dissemination of information, the need to consolidate an online community outside the web context, the identification of the brand more with Fogazzi's personal communication than as a beauty line detached from her personality¹⁰.

6 Conclusions

¹⁰ For additional information: <https://www.veralab.it/>

The present work provides evidence that a humanistic-led business, founded and ruled according to humanistic values, can face exogenous adverse conditions of crises thanks to its features of commitment to social goals beyond profitability. Practices aimed to sharing purpose with workers and communities (both local community and digital community), to safeguarding dignity of work and healthcare, to promoting a message of civic engagement and social awareness are crucial to enhance business opportunity in times of crisis. Features of authenticity and identification between Cristina Fogazzi's personal online strategy and her company's values, are key in understanding the unprecedented success of the firm amidst Covid-19 outbreak. In this light, the role of the entrepreneur has been twofold: both at the managerial level of the company, by providing best practices to prevent workers' illness and insecurity (additional to law requirements) and concerning the use of her personal communication channels (mainly social media) to produce a narrative around female leadership and civic engagement in social and gender-related issues. In this light, the present work contributes in shedding new light on the relevance of a humanistic management approach undertaken for SMEs in facing adverse economic conjunctures and in facing unpredictable and unprecedented socio-economic challenges.

The current work presents features of originality in the choice of the case study, as Re-Forme S.r.l. has not been analyzed yet through both business ethics and strategical studies approaches, and in the attempt to provide HME field with an Italian case of female entrepreneurship based on quality employment within the SMEs scenario. Moreover, it adds to very recent literature on how Italian SMEs have faced challenges posed by the pandemic both on an economic level, as well as on a moral level, concerning issues such as public health and gender inequalities. Consequently, it provides relevant insights into how values and goals of the enterprise are key in understanding their behavior and choices in troubled times, as well as it contributes to outline best practices and innovative approaches for female humanistic entrepreneurship, sustainable business models and business ethics perspectives to overcome times of crisis.

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Exploring the role of circular start-ups in promoting a more sustainable and humane entrepreneurship

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Abstract

The themes of climate change, over-consumption of resources and social inequality are some of the most important current issues that the society has to promptly tackle. In this context, the circular economy paradigm is attracting a great interest of the policy-makers, organizations and scholars as it is expected to contribute to reduce the environmental impact of human activities by prolonging the value of resources as well as better revalorising them. The application of Circular Economy model also entails circularity in the relations between the actors of the society, e.g. between organizations and its stakeholders for pursuing a more inclusive society. In this scenario, organizations play a

critical role in addressing the environmental and social challenges as actors able to trigger deep and necessary changes through their strategic choices. In fact, at worldwide level there are numerous Small and Medium Enterprises (SMEs), as well as innovative start-ups that are showing a high level of awareness about these challenges and are adopting new business models more aligned with the current sustainable vision of doing business in which the care of people, the environment and society assumes a key role. Moreover, circular start-up companies seem currently much suitable of adopting disruptive circular strategies and move away from the linear model of production and consumption of resources, while large incumbents tend to focus on consolidated circular strategies that do not imply a much stronger shift in the core business models. Despite it, the evaluation of circular strategies and circular business model innovation adopted by start-up companies received a lower attention in the international scientific literature compared to large incumbents. In order to tackle such issue, this paper investigates the business models of circular start-ups with the main goal of understanding how they contribute to achieve a more inclusive, human-centred and environmentally friendly society through a multiple case studies approach. The six case studies analysed show how circular start-ups focus on innovating waste management and treatment activities creating new forms of innovative entrepreneurship able to generate positive social impacts other than environmental and economic ones. Finally, results show that circular start-ups could play a critical role in the transition to circular business models in particular by facilitating the close of the loop as required by the circular economy paradigm, as well as by pushing large incumbents to develop circular business model innovations.

Keywords – Circular economy, Circular start-up, Sustainability, Humane entrepreneurship, Civil economy.

Paper type – Academic Research Paper

1 Introduction

The themes of climate change, over-consumption of resources and social inequality are some of the most important current issues (Schröder et al., 2020) that all the actors of the society, including entrepreneurs (Muñoz and Cohen, 2017) and policy-makers (European Parliament, 2021) need to address them promptly (Calisto Friant et al., 2021; Kalmykova et al., 2021; Schröder, 2020; Inigo and Blok, 2019). In this context, the circular economy (CE), is attracting a huge interest in the society since the last five years (Van Langen et al., 2021; Padilla-Rivera et al., 2020) as it is expected to contribute to lower the demand of natural resources and energy (European Parliament, 2021) and their associated environmental burdens by

prolonging the value of all type of resources as well as better revalorise them (Kalmykova et al., 2021; Ghisellini et al., 2021, 2016; Schöggel et al., 2020). The application of CE model also entails circularity and improved relations between all the actors in the society (e.g., between the organizations and its stakeholders such as the employees, workers, consumers, local community and the whole society) (Cavarei, Atlante dell'economia circolare, 2021)¹¹. In practice this reflects, for example, into the provision by the organizations (profit or non-profit) of more employment opportunities in the local territory where they are active and a better valorisation and participation of all kind of employees and workers such as youths, women, immigrants, disadvantaged people (Quid, Atlante dell'economia circolare, 2021)¹² and elimination of children labour (Rifò, Atlante dell'economia circolare, 2021)¹³. In overall, the development of CE should help in pursuing a more inclusive society (Corvelléc et al., 2021; Padilla-Rivera et al., 2020; Schröder, 2020), that is particular urgent in this (hopefully) post Covid-19 pandemic, as well as the recovery and resilience of the European economy and society (European Commission, 2021) within the ecological transition by 2050 (European Parliament, 2021).

Furthermore, according to the Humane entrepreneurship paradigm, organizations increasingly play then a fundamental role in addressing the environmental and social challenges as actors able to trigger deep and necessary social changes through their strategic choices (Cohen and Winn, 2007; Dean and McMullen, 2007; Parente et al., 2018; York and Venkataraman, 2010; Zahra et al., 2009) and circular production models (Ghisellini and Ulgiati, 2020).

This paper investigates the business models of circular start-ups (CSUs) with the main goal of understanding their contribution to achieve a more inclusive, human-centred and environmentally friendly society. The CE is still mainly perceived as a zero-waste economy in particular by policy makers and centred on the conventional concept of “recycling” (Van Langen et al., 2021; Schöggel et al., 2020). However, case studies show how circular start-ups focused on innovating waste management and treatment

¹¹ Cavarei, Atlante dell'economia circolare, available at:
<https://economiecircolare.com/atlane/cavarei/#field-group-tab-2>

¹² Quid, Atlante economia circolare, available at:
<https://economiecircolare.com/atlane/progetto-quid/#field-group-tab-3>

¹³ Rifò, Atlante dell'economia circolare, available at:

activities¹⁴ (Sfrido, 2021¹⁵; Madonna, 2020) can create new forms of sustainable entrepreneurships (Muñoz and Cohen, 2017) also generating positive social impacts other than environmental and economic (Ghisellini and Ulgiati, 2020). Moreover, during the Covid-19 pandemic such start-ups have been crucial in facing the health needs of the society (Cariplofactory, 2020), thanks to the flexibility of their digital technologies (Madonna, 2020). This shows that circular start-ups could be important in delivering both environmental, technological and social innovation and instil new values of civil responsibility and cooperation for the common good and public happiness in entrepreneurship. The presence of a productive system that is not only profit driven and aims to satisfy the interests of a wider range of stakeholders and of the society are one of the fundamentals of the current paradigm of “civil economy” (Becchetti and Cermelli, 2018) originated from the thoughts of Antonio Genovesi (1765) in the eighteenth centuries. Central in the thought of Antonio Genovesi (1765) was the role of the human virtues as crucial for the functioning of the economic system (Bruni, 2006).

Therefore, in this study, our research questions are the following:

How start-ups apply the different principles of the CE (e.g. reduction, repair, reuse, remanufacturing, recycling)?

What are the social, environmental and economic impacts of their activities?

How do they measure, certify and monitor their environmental and social impacts?

What is the contribution of circular start-up to the development of new forms of entrepreneurship more human-centred such those suggested by the theoretical framework of civil economy?

2 Literature Review

Scholars are increasingly engaged in the definition of new entrepreneurial models capable of leading towards a more sustainable socio-economic development (Kim et al., 2018; Kuckertz and Wagner 2010; Parente et al., 2018; Shepherd and Patzelt, 2017). As a consequence of this scientific debate, the Humane Entrepreneurship model has emerged as a new organizational paradigm (Parente et al., 2018).

The Humane entrepreneurship model requires firms to take care of people, environment and society in general (Kim et al., 2018; Parente et al.,

¹⁴ The start-up named Remade in Rione Sanità has created a new circular production model by recycling plastic and metals in urban centres innovating the conventional municipal waste management system.

¹⁵ Sfrido, 2021, available at: <https://www.sfridoo.com/en/> Last accessed: 19/11/2021.

2018). Specifically, firms are able to achieve higher profits and competitiveness when they respect employees, offer wealthy and adequate working conditions, and pursue social and environmental sustainability goals (Kim et al., 2018; Symbola, 2018).

It is worth claiming that the United States and Italy were among the first countries to recognize the importance of Humane entrepreneurship model as a means of addressing all the above-mentioned humanity issues. In fact, at worldwide level there are numerous Small and Medium Enterprises (SMEs), as well as innovative start-ups that are showing a high level of awareness of these challenges and are adopting new business models more aligned with the current sustainable vision of doing business in which the care of people, the environment and society assumes a key role (Parente et al., 2020).

In this perspective, firms are drivers of inclusiveness and competitiveness for the territories where they operate (Symbola, 2018) and become a shared project with all the stakeholders of such territory (Bruni and Zamagni, 2015). In that, the firm has for the entrepreneur an intrinsic value and reflect his/her identity and of a particular territory. Indeed, it is a project and much more than a machine for making money (Bruni and Zamagni, 2015) since profits are one of the variables of the entrepreneurial project along with others such as the creation of good quality labour opportunities and the pursuing of the common good and public happiness (Zamagni, 2010). The latter element is at the hearth of the “civil economy” that was born as a “science of public happiness” by the thoughts of Antonio Genovesi (1765) in the 18th Century.

Public happiness is strictly linked to the common good of a community or a nation since it is a goal that is achieved by the coordinated actions of all the societal actors (Becchetti and Cermelli, 2018). These latter cooperate together to pursue the public happiness and by this to the take up of the economic and social development (Balzano et al., 2018). According to Antonio Genovesi (1765), if anyone fails to cooperate, the economic and social development pattern become blocked resulting in the creation of “poverty traps” (Zamagni, 2010). Hence the importance underlined by Giacinto Dragonetti (a disciple of Antonio Genovesi) of introducing awards to encourage virtues and civil responsibility rather than only punish citizens with offenses and crimes (Bruni, 2013; Zamagni, 2010). The award strengthens and links together the general interest with the individual and particular interest. In this sense, the award is given to the virtuous individual for the gratuity of the services who delivers (Bruni, 2012). This shows that the virtue is something that primarily born inside the individual and is linked

to a cultural and an ethical advancement in a process of co-evolution towards a new path of socio-economic development (Bruni, 2012).

The current environmental and social challenges also require to presence of virtuous individuals, be them entrepreneurs or consumers or policy makers, in order to accelerate the transition towards the CE and a more sustainable human development (Padilla-Rivera et al., 2020; Schröder et al., 2020).

The evaluation of circular strategies and circular business model innovation adopted by start-up companies received a lower attention in the international scientific literature compared to large incumbents (Henry et al., 2020). Circular start-up companies seem currently much suitable of adopting disruptive circular strategies (Henry et al., 2020), and move away from the linear model of production and consumption of resources (Maglio et al., 2020) since they show the needed cultural and ethical advancement for the CE transition (Bressanelli et al., 2019). Large incumbents tend to focus on consolidated circular strategies that do not imply a much stronger shift in the core business models (Bocken et al., 2020, 2017; Stewart and Niero, 2018). The scale-up of the waste hierarchy beyond recycling (Haas et al., 2015) has the potential of making the CE more functional to the achievement of climate neutrality goals set by the European Green Deal (European Commission, 2020; 2019) and United Nations 2030 Agenda for Sustainable Development¹⁶. The latter is embedded in the priorities of European Political Agenda to the year 2030¹⁷. Moreover, Greer et al., (2020) by means of a case study of a network of circular start-ups in catering sector show the innovative capacity of circular start-ups in creating tools that can be applied to other industrial sectors as well as societal subsystems (cultural and political) contributing to unlock relevant barriers in the CE transition path (Bosman and Rotmans, 2016).

Circular start-ups are in many cases also linked to a specific territorial context as they born in response to local waste resources problems (e.g., abundance of agri-food by products or urban waste issues) (De Angelis and Feola, 2020) and are key in addressing social inclusion of people by providing new employment opportunities or training programmes for new professional skills (Ghisellini and Ulgiati, 2020).

¹⁶ United Nations Development Goals, available at: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Last accessed: 09/07/2021.

¹⁷ EU holistic approach to sustainable development, available at: https://ec.europa.eu/info/strategy/international-strategies/sustainable-development-goals/eu-holistic-approach-sustainable-development_en. Last accessed: 12/07/2021.

3 Approach/Method

This section deals with the method adopted in this research to achieve our goals. It is organized in two subsections: research design and sample, data collection and analysis. We start by introducing the type of organizations and involved sectors, and then describing how the selected organizations have been identified (research design and sample) and which kind of data regarding them have been chosen and analysed (data collection and analysis).

3.1 Research design and sample

Our research considers a small sample of Italian companies (mainly start-ups) distributed in different economic sectors which are responsible of relevant environmental impacts in the life cycle of products, such as textile, construction and food supply chain (European Commission, 2020).

In order to evaluate the contribution of circular start-ups in achieving a more inclusive, human-centred and environmentally friendly society we adopted an exploratory, qualitative methodology consisting in the analysis and comparison of six case studies. In this regard this research aligns with previous recent studies (De Angelis and Feola, 2020) who investigated how an innovative Italian spin-off company, namely, “Naturalmente colore”, was experimenting the adoption of circular principles and business models. We have chosen to analyse a sample of start-up companies because they are more innovative at cultural level (Bressanelli et al., 2019) and are particular meaningful as they are less constrained in adopting CE in a radical way compared to traditional companies (Bressanelli et al., 2019; Gusmerotti et al., 2019). Moreover, often this kind of firm is born as circular start-ups, showing different interesting characteristics for this study.

The sample in this research has been built by means of a search in the Atlas of the Circular Economy¹⁸. The latter platform, in particular, hosts many secondary data on the organizations (including start-ups). For each company, the Atlas dedicate a web page, where it communicates how each organization is experimenting the CE, the features of their products/services and their environmental and social policies. The Atlas is also a channel for disclosing information about the circular products of the organizations to the consumers and the construction of "circular" supply chains based on the principles of sustainability and circularity.

¹⁸ Atlas of the circular economy, available at: <https://economiecircolare.com/atlante/>

3.2 Data collection and analysis

The data collection is based on a systematic approach. A comprehensive review and content analysis was carried out using the information available in above-mentioned online database as well as from the personal websites of the selected start-ups. In order to have a more comprehensive picture of each selected start-up, information from additional sources (e.g., company reporting, industry reports and magazines, startup ecosystem actors' websites) were collected and thoroughly analysed. The websites and the complementary sources were analysed looking for information related to the adoption of specific circular economy approaches and practices. In particular, the empirical analysis has been conducted through the following five steps:

- 1) Document search: the material regarding the selected start-up were identified using specific key words from the Atlas of the Circular Economy, start-up websites and other relevant sources (e.g., company reporting, industry reports and magazines) (e.g. Labuschagne, 2003; Zhang and Wildemuth, 2005);
- 2) Document selection: the materials of interest were selected in parallel by two researchers and collected in a document management system (Labuschagne, 2003; Zhang and Wildemuth, 2005);
- 3) Manual analysis: the two researchers analysed in-depth the materials selected and a database has been created to identify for each start-up a list of CE approaches and practices adopted (Hsieh and Shannon, 2005; Bowen, 2009);

The next steps that the research group will perform in the development of this study include:

- 4) Confirmation analysis: the data collected in the previous phases were confirmed and/or supplemented by interviews performed by telephone or videoconference to guarantee their reliability (Angers and Machtmes, 2005; Bowen, 2009). Interviews were guided by a case study protocol (Gibbert et al., 2008; Yin, 2003; Eisenhardt, 1989) based on inputs from the circular economy, sustainability and innovative entrepreneurship literature. Each interview lasted on average one hour and half;
- 5) Triangulation of findings: the results provided by manual analysis (step 3) and confirmation analysis (step 4) will be validated through cross verification (Patton, 1990; Eisner, 1991; Angers and Machtmes, 2005; Bowen, 2009).

Thus, the results disclosed in this study are preliminary information and data set.

4 Results

This section deals with the presentation of the results coming from the analysis of the preliminary data collected. It starts to describe the stories of the six selected start-ups (Equilibrium, Packtin, Pimento, Orange Fiber, Rifò and Connecting Food) and deepens on their circular production models in the other sections in order to respond to our research aims.

4.1 The selected circular start-ups and their stories

The start-up “Equilibrium”, has been founded in the year 2011 by one of the co-founders after a period of post-graduate research in innovative bio-composite materials for construction sector. The reintroduction of hemp as a crop in Italy has been the main aim for creating “Equilibrium” that has its headquarters in a town near Lecco (Northern Italy) in a facility (a former industrial plant for the manufacture of concrete blocks no more in operation due to the maturity of the product) converted to the purposes of the start-up by the founders. “Equilibrium” is active in the fields of bio-construction materials and in the construction solutions for energy efficiency and sustainability (Legambiente, 2016).

In the first year of activity, the start-up developed and introduced on the Italian market the concrete block Biomattone mainly composed of Natural Beton, a material obtained by combining the hemp vegetable chipboard with a lime-based binder and natural additives. These latter contribute to stabilize the hemp as a vegetal component while protecting it from decomposing, burning or attacks from insects or rodents. The particular features of the hemp chipboard consisting of microscopic alveoli filled with air of nanometric dimensions, allow the continuous micro-condensation and evaporation providing to the product a high thermal-acoustic and hygrometric insulation. The Biomattone is also designed to be recyclable and biodegradable at the end-of-life (Legambiente, 2016).

“Packtin” is a spin-off of the University of Modena and Reggio Emilia born in 2017 after years of research on edible and biodegradable packaging. Their current production consists in supplements, biodegradable packaging, edible coatings and ingredients for food preservation and safety. These products improve the shelf life of fresh food, reduce food waste and the use of plastic packaging while increasing food safety¹⁹.

The company's goal is to create circularity at different levels: on suppliers' level by maximizing the value of their by-products compared to the disposal or bio-composting options; at the product level, as all or most

¹⁹ Packtin, available at: <https://www.packtin.com/en/>

of the fractions extracted from the by-products are delivered to the proper market of application and at domestic circularity level, since natural preservatives optimize the management of fresh food at home²⁰.

“Pigmento” has been created by the idea of two founders (an economist and a chemist) and started its activity at the beginning of the year 2016. The start-up has the headquarters in the towns of Melfi and Florence where there is the operative centre.

“Pigmento” produces ecological and non-toxic dyes only from agri-food waste (such as spinach leaves, coffee grounds, wine must, almond husk, onion skin, elderberries) without additives or chemical substances by combining ancient processes (in the past agri-food by-products were used to produce dyes) with new technologies in order to convey to the dye an intense colour and long-lasting features. Its products are used in many sectors such as textile, bio housing, cosmetics, alimentary and are sold both in powder or liquid forms depending on the demand of the customers²¹.

“Orange Fiber” was founded as an innovative start-up in Catania in the year 2014 by the idea of two women as founders with previous graduation and work experience in communication and project management and a strong passion in social entrepreneurship. The two founders, since 2012, were looking for an opportunity of valorisation of the great amount of citrus juice by-products generated annually in their area. Their aim was focused into the development of a disruptive technology that could create an innovative fabric out of industrial by-products. In that, after the conception in 2012, their idea of a fabric from citrus by-products become a reality and a registered trademark in August 2013 after a feasibility study of the Polytechnic of Milano. In 2014, the formation of “Orange Fiber” as a company was followed by the presentation of the first prototype of fabric from citrus by-products at the Expo of Milan. Then, at the end of 2015, the first fabric production was completed following the opening pilot plant for the extraction of citrus pulp in Sicily. In April 2017, “Orange Fiber” presented the first fashion collection by Salvatore Ferragamo created with its exclusive fabric. The latter have been also included in the H&M Conscious Exclusive Collection and used to create a limited edition of ties by the artisan brand E. Marinella²².

“Orange Fiber” has grown in the last years from a start-up to a recognized industry leader in innovative and sustainable textile production. It has also won many awards. In 2020 the company has been selected as official

²⁰ Atlante economia circolare, Packtin, available at: <https://economiecircolare.com/atlante/packtin/#field-group-tab-2>

²¹ Pigmento, available at: <https://pigmentonaturale.com/>

²² Orange Fiber heritage, available at: <https://orangefiber.it/heritage/>

nominator at the Earth shot Prize²³ by the Royal Foundation of the Duke and Duchess of Cambridge²⁴.

“Rifò”, a start-up leading in the fashion sector has been created thanks to the project idea of one of the founders in the year 2017. The name of this start-up, “Rifò” (originated from the verb "to redo") has been chosen by the founders as it reflects the spirit of Tuscany people and the way of speaking of the artisans who invented, more than a hundred years ago, the method of regenerating old garments to produce a new yarn: the so-called "Cenciaioli". Furthermore, “Rifò” aligns with their will of doing and continuing a traditional craft that has been disappearing in recent years²⁵.

“Rifò” moved officially in the year 2018, from an idea of one of the founders to a venture located in Prato (central Italy) with a social aim after joining the “Hubble” acceleration program at the Nana Bianca accelerator in Florence, with the support of Research and Development Foundation and Fondazione Cassa di Risparmio di Firenze²⁶. The idea underlying the creation of “Rifò” was conceived outside of Italy, in Vietnam, where one of the founders, during a journey in that country, became aware of the huge problems coming from the overproduction and overconsumption of fashion industry.

The team of the start-up is currently composed by the founder and several members with different ages and skills (ranging from fashion designers to product developers and communication specialists).

“Connecting Food” was born at the end of 2016 from the passionate idea of food industry of the two co-founders, who had a wide previous working experience in food industry, where they had marketing roles for some of the biggest international food brands. Their strong interest in products and their composition, combined with their curiosity for the conditions and methods of production, naturally led them to move upstream in the life cycle of food. In creating their start-up they shifted from the “marketing of promises” to the “marketing of proof” since their aim is assuring and promoting quality in the food chain by increasing its transparency²⁷.

“Connecting food” offers operators in the agri-food sector digital transparency solutions, able to provide the total traceability of the products in real time, verifying their quality and ensuring that every actor in the life cycle of food meets their commitments.

²³ Earthshot prize, available at: <https://earthshotprize.org/>

²⁴ Orange Fiber, available at: <https://orangefiber.it/>

²⁵ Rifò, our story, available at: <https://rifo-lab.com/en/pages/chi-siamo>

²⁶ Rifò, available at: <https://economiecircolare.com/atlante/rifo/>

²⁷ Connecting Food, about us, <https://connecting-food.com/en/about-us/>

4.2 How start-ups apply the different principles of the CE (reduction, repair, reuse, remanufacturing, recycling)?

Henry et al., (2020) provided a framework for classifying the current typologies of circular start-ups. In doing so, they identified five main categories of start-ups: design-based, waste-based, platform-based, service based, nature based and others. We analysed the selected start-ups and how they are implementing the CE by adopting their framework. One of the start-ups belongs to the design-based start-ups (Equilibrium) while four of them are waste based start-ups (Packtin, Pigmento, Orange Fiber, Rifò) and one can be classified in the platform-based category (Connecing Food).

4.2.1 Design-based Circular Start-ups

This category focuses on start-ups having developed their circular production models on the principles of “Reduce/Reuse”. This involves the design of products that have particular environmental and energy performances and are also recyclable at their end-of-life.

“Equilibrium” aims to realize in their construction products made of lime and hemp-based compounds the reduction of energy use while assuring the living comfort of the occupants of buildings. The products are designed to be recyclable and as more eco-sustainable alternatives and energy efficient than conventional products. Hemp, as a core material used in their products, is an annual plant with a high biomass production and strong absorption of CO₂ from the atmosphere. Its use provides an overall negative balance of CO₂ emissions in the insulation systems as the amount of CO₂ captured and sequestered is greater than the amount released during the life cycle of the material²⁸.

4.2.2 Waste Based Circular Start Ups

In this category are included start-ups that seeks to extract value from unexploited external waste streams (e.g., from food waste) by means, most often, of innovative processes (Henry et al., 2020). Four of the selected start-ups belongs to this category. The main aspects of their production processes and life cycles are briefly described in the following:

“Packtin” recovers raw materials from food industrial waste of products such as orange, apple and tomato peels, spent sugar beetroots. From these the company extract bio-polymers and active compounds (as can be seen from **Figure 1**) for the creation of supplements, biodegradable packaging, edible coatings and ingredients for food preservation and safety. In that, such products return in a new production cycle to be used in agri-food

²⁸ Equilibrium, chi siamo, <https://www.equilibrium-bioedilizia.it/it/chi-siamo/start-innovativa>

industries. Their innovative production process aims to meet 3 main challenges: decrease food waste; save materials and energy during the packaging disposal and start a virtuous cycle which uses secondary materials from natural origin for the production of high-quality products.



Figure 1. Production process of Packtin. Source: <https://www.packtin.com/>

“Pigmento” produces dyes by recovering materials from agri-food waste (Figure 2). The production cycle starts with the recovery of waste and its processing in the company’s facilities to obtain dyes without sophistications, additives or chemical contaminations. The dyes are created in the laboratory by using organic solvents in order to extract the pigments from the vegetable by-products matrixes. The production of the dyes occurs with advanced equipment so to be able to produce the required quantities.

The mechanism for the production of the dye is the same no matter of the food by-products matrix. The pigment is extracted, concentrated and used as a base for colouring. Anthocyanins, belonging to the larger family of flavonoids, which are the molecules responsible for their colour, are extracted from the peels of red onions. The chlorophyll extracted from the discarded leaves of spinach is used to obtain the green colour. The coffee grounds are used to obtain the brown colour. However, other raw waste materials are also used such as the Aglianico of Vulture, elderberries and

almond husks. **Figure 2** shows that the production process also generates output waste that become compost returning in that way to the soil also contributing to enrich it for the future production of agricultural products²⁹.

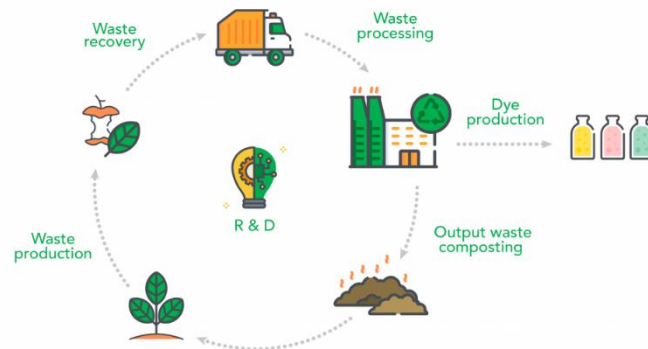


Figure 2. Pigmento production process. Source: <https://pigmentonaturale.com/>

The life cycle of fabrics produced by “Orange Fiber”, starts at the centre of the **Figure 3**. The fabrics are centred on Sicilian citrus (stage 1), that after use for juice production in food industry (stage 2), become waste (stage 3). “Orange Fiber” extracts the cellulose from the citrus fruits in partnership with a pressing company (stage 4)., In such partner company, Orange Fiber has installed its own plant in order to be closer to the production site of the raw materials for the fabrics, to trace its origin and bring value to the territory in terms of innovation, sustainability, creation of new jobs, competitiveness. The cellulose extracted in Sicily is sent in Spain in order to make it suitable for spinning (stage 5) and then transformed into a fabric in Como in northern Italy (stage 6). Finally, the fabrics is used in fashion sector for the production of high-quality brands (stage 7).

Indeed, this logistic represents a central aspect of “Orange Fiber”. The company evidences the attention to the environment and social impacts that extends throughout the supply chain which actors are selected and the phases monitored to ensure product quality and respect of corporate values.

²⁹Pigmento, available at: <https://www.ohga.it/pigmento-il-colorante-naturale-che-dona-una-seconda-vita-agli-scarti-vegetali/>

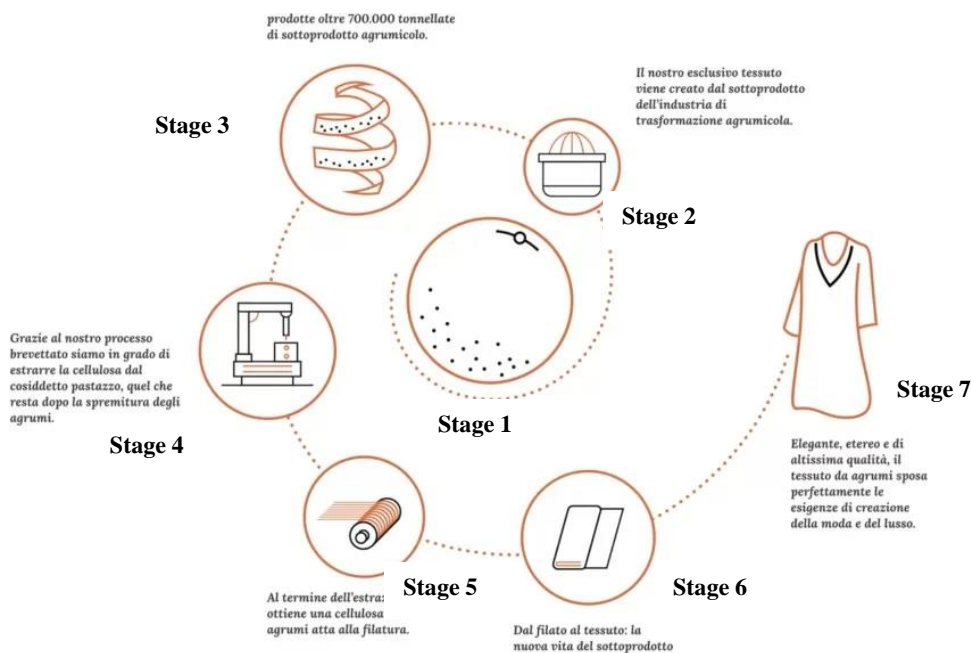


Figure 3. The life cycle of fabrics produced by Orange Fiber (each one of the phases are commented in Italian) from the recovery of by-products generated after the production of juice from citrus to the production of fabrics from cellulose. Source: <https://economiecircolare.com/atlante/orange-fiber/>

“Rifò” produces sustainable and quality yarns by recycling yarns from old garments. The latter are frayed and transformed again into raw material, spun and then woven into new durable and quality garments. This particular process has a long tradition in the textile district of Prato (Italy) and allows in most cases to avoid to re-dye or over-dye the fibres. The main secondary raw materials considered in their process are old cashmere sweaters from which they produce soft cashmere sweaters, old cotton jeans with a cotton content by at least 95%. These are recovered into new sweaters and denim fabrics. Finally, they also reuse recycled cotton from industrial waste for the creation of fresh t-shirts, polo shirts, beach towels and shawls³⁰.

4.2.3 Platform based Circular Start-Ups

Platform-based CSUs adopt circular business models that focus on the following production and distribution solutions for delivering the surplus of resources: Business to Business (B2B), Business to Consumers (B2C) or Consumer to Consumer (C2C). In that the implementation of platform

³⁰ Rifò, available at: <https://rifo-lab.com/>

supports the trading or sharing of products, knowledge, infrastructure or services (Henry et al., 2020).

In this category, “Connecting Food” was born with the aim of proposing solutions based on the Blockchain to track and verify food products, in real time and without the risk of counterfeiting. They propose themselves as a third party in transparency that is at the hearth of their production process. They require to the actors in the life cycle of food be transparent in the areas of animal welfare, producers’ income and work condition, products origins and environmental promises. The integration of the blockchain with the digital quality control function is claimed to be unique in the world according to the founders.³¹

4.3 What are the social, environmental and economic impacts of their activities?

Besides the economic aspects all the start-ups devote attention to the environmental and social impacts associated to their activities even if with more or less extended visions and awareness of their impacts and certification commitments. These aspects emerge from the analysis of the data on the Atlas of the circular economy and on their websites. At this regard “Equilibrium” orients its production to bio-composite materials and applications for the construction sector with attention to energy saving reduction goals and better living comfort in buildings. Its vision is based on a strategic circular development where the company proposes itself “as a future-proof business model committed in playing an active role ahead of times by applying strategic planning tools towards sustainability”. They evidence that their goal is to create “sustainable value” contributing to tackle the concentration of pollutants, climate change and nature degradation to allow for the current and future generations of satisfying their needs³². Both “Packtin”, “Pigmento” and “Orange Fiber” underline in their websites that their production models try to respond to some of the current challenges of agri-food sector that call for decreasing the amount of food waste, save materials and energy, avoid the economic costs due to their disposal and boost a virtuous cycle which uses materials of natural origin. In this perspective, also Connecting Food that focuses on improving the

³¹ Connecting food, mission, available at: <https://connecting-food.com/en/our-mission/>

³² The company is founded on three main pillars:

Respect for the environment and the commitment to regenerate it

Respect and enhancement of the human capital that gives it life and of the relationships with the people it interacts with; Attention to the economic return necessary to operate and invest in innovation, research and development

transparency of the whole food chain is aware of food losses and food waste problems. The information we gathered also highlights that by identifying the channels for which the product is more suitable for their reuse, they contribute to avoid products are discharged, thereby reducing industrial food waste.

“Orange Fiber” and “Rifò” are also well aware of the environmental impacts of the textile sector and in particular “Rifò” adopts a strategy “pre-sale” to understand the market demand and avoid overproduction. They say that “producing small quantities allows them to control the production chains as well as its quality “and point out that the adoption of a circular economy process is “not enough to solve the issue of overproduction”. If production exceeds demand, there will always be an unsold quantity that could turn into a massive amount of waste. According to “Rifò”, a sustainable circular production must also be “ecological, simple and fast, including a small stock that meets the real needs of customers”.

“Rifò” has also a strong relationship with their supply chain actors who share with them the commitment of producing small quantities in order to avoid overproduction. Moreover, “Rifò” requires to its artisans to share its values and agree with its ethical code and the 4 main International Labour Organization (ILO) principles:

- Freedom of association and the effective recognition of the right to collective bargaining;
- The elimination of all forms of forced or compulsory labour;
- Effective elimination of child labour;
- Elimination of discrimination in employment and occupation.

Finally, we found that “Rifò” as well as “Equilibrium”, “Orange Fiber” and “Pigmento” also communicate in their websites a strong local identity with the territory from which they derive important lessons also useful to improve the environmental and social sustainability of their processes.

4.4 How do they measure, certify and monitor their environmental and social impacts?

Some of the start-ups also communicate and certify their environmental and social responsibility by means of the available certification tools. “Equilibrium” underlines that it has certified the environmental and social performances of its product “Biomattone” by means of a Strategic Life Cycle Assessment (SLCA) tool. The latter has been developed by the Natural Step, that is a non-profit organization that supports organisations by providing services for addressing their demand of managing the sustainability challenges. The SLCA combines the requirements of the ISO standard for Life Cycle Assessment (ISO 14044) with the strategic planning

methodology of the framework developed by the Natural Step³³. It is not clear if “Equilibrium” monitors the environmental and social performances of “Biomattone” over time since the SLCA studies available in its website is not recent (2011-2012).

An important aspect is related to “Rifò” that highlights that its supply chain is entirely located in the textile district of Prato, within a range of 30 km. The company says that it is committed to make all its products environmentally and socially sustainable by limiting fuel consumption, creating new job opportunities that are also fairly rewarded.

“Orange Fiber” underlines their continuous commitment towards the improvement of its environmental performances. However, at the moment the start-up does not show the adoption of available environmental certification schemes. The company claims to produce the fabrics of the future that are sustainable fabrics since they are made from citrus by-products.

5 Discussion

A radical and global change towards new frontiers of production and consumption is necessary and urgent given that in particular climate change is getting worse and displaying its effects in all regions on the Earth in multiple ways (IPCC, 2021; European Commission, 2019).

In this scenario, firms have a strong responsibility. Indeed, as pointed out by the Global Commission (2019), innovation is essential for sustainable growth; companies that are able to find innovative solutions can create new business opportunities more environmentally friendly and gain a competitive advantage. In fact, innovation could support firms to review the traditional industrial paradigms, based on a linear model of production and consumption, reconceive the concept of waste, moving from a negative meaning to its enhancement as a resource, place social and environmental objectives alongside economic objectives and manage them in an effective, efficient and simultaneous way.

According to this, circular entrepreneurship is emerging increasingly as a way of creating value capable of responding to the needs of a world characterized by more and more limited resources and severe social imbalances (Zucchella and Urban, 2019).

Our results show that all CSUs analysed state in their mission and vision their will to commit themselves to the protection of the environment. This

³³ The SLCA process is carried out in ten steps that combine the requirements of the ISO standard for Life Cycle Assessment (ISO 1404X) with the strategic planning methodology of the Framework for Strategic Sustainable Development. <https://thenaturalstep.org/slca/>

goal represents the milestone on which each one of the CSUs conceives its business idea. In addition to allowing the reduction of waste, especially by reusing it as raw materials, and a production that aims to impact the environment as little as possible, such CSUs are often also engaged in various social activities. This makes clear that CSUs are able to pursue economic and non-economic objectives (e.g. social, environmental, etc.) at the same time also aligning with the principles of a more human-centred entrepreneurship. In this view, some of the selected start-ups create a project of firm more shared with their stakeholders and the local territory contributing to the pursue of the common good and the public happiness in line with the civil economy principles.

Moreover, born circular, as the start-ups analysed in this study, could represent an easy, effective and efficient way to help socio-economic systems to transit towards CE paradigm. In fact, for these CSUs, born circular means to adhere to the principles of the CE since their foundation without to re-think their organizational processes and practices. On the contrary, growing circular firms are traditionally linear companies, which are in transition towards circular business models. These are often medium and large companies, founded for several years and with different established routines, and consolidated business models that make changes very complex (Mura et al., 2020; Bressanelli et al., 2019; Gusmerotti et al., 2019).

Hence, focusing on the obtained results, it is possible to claim that (born) circular start-ups could play a critical role in such socio-economic transition in particular by facilitating the close of the loop as required by the CE paradigm (Henry et al., 2020). In other words, CSUs could support larger incumbents to develop circular business model innovations, becoming upstream circular companies by selecting partners which can provide biodegradable materials or reusing/remanufacturing different kind of waste (e.g. Rifò, Orange Fiber, Packatin, Pigmento) or becoming downstream circular companies by modifying their customer interfaces (e.g. Connecting Food) (Urbinati et al., 2017).

Based on this, it is possible to claim that circular start-ups could be critical actors of the transition towards the CE, both by driving and triggering such change through their economic and social activities, as well as they can also represent important examples to imitate for all actors in the economic ecosystem.

Finally, our results also show that the start-ups have different levels of environmental and social awareness. Some of the waste based circular start-ups, in particular, are focused on a concept of sustainability centred in the recovery of waste. This seems to disregard the other phases of the life cycle

that involve the return in the production cycle of the recovered material from waste. It would be important for such start-ups to evaluate the sustainability of the whole life cycle of their products to avoid burden shifting from one stage to another vanishing their efforts in contributing to solve the environmental and social challenges. On the contrary, waste based circular start-ups born in industrial districts seems to have a higher level of environmental and social awareness also certified by recognized ethical codes. This leads to suggest that future research could further deepen on the analysis of CSUs born in industrial districts (Cavallo et al., 2018) in order to understand the role of the district in influencing the environmental and social awareness of the start-ups being created in the district.

6 Conclusions and Implications

This paper contributes to the existing literature and research providing further evidence and knowledge on the ways of generating social, environmental and economic value by circular start-ups. In that, it sheds light on a concept of value created more in line with the three pillars of sustainability and the challenges posed by the current Covid-19 pandemic (Barbier and Burgess, 2020) that call to rethink the current business models of SMEs and start-ups in new and more sustainable ways (Pencarelli et al., 2020) that are both good for the Planet and People.

The implications can be theoretical, practical and political. Both “human entrepreneurship” and “civil economy” school of thought suggests alternative models of enterprise and entrepreneurs also oriented towards other goals than profits. The “civil economy” considers the entrepreneur an active subject that favour the inclusion and circulation of all type of resources in the production process and in particular of labour cooperating in this way with the other actors to the achievement of common good and public happiness.

Our study provides practical and useful guidelines and insights able to inspire established SMEs to adopt circular approaches, and innovative start-ups to implement a circular business model since their foundation. Moreover, our results show the economic and social feasibility of circular enterprises. Indeed, all circular start-ups analysed show in their mission the will to commit themselves to the planet, as well as their engagement in various social (and local) activities even if with different level of awareness and responsibility. It therefore becomes clear that circular companies make it possible to narrow the boundary between economic and non-economic objectives, by pursuing both at the same time.

Finally, policy makers could improve their understanding on the models of circular start-ups to better focus their intervention in favour of more sustainable start-ups. Environmental and social certification would be an important tool for selecting them by providing transparent and reliable information on their environmental and social performances. Moreover, the support of appropriate learning environment and start-ups support initiatives can provide a key contribute to the development of circular start-ups and, at the same time, to innovation and three pillars-based sustainability (Passaro et al., 2017).

Specifically, they could define tailored policy measures able to effectively support, on the one hand, the transition of the established SMEs towards circular entrepreneurship models and, on the other hand, the birth of circular innovative start-ups able to pull the technological innovation aligned with the environmental and social renewal.

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***COVID Impact on SMEs:
Resilience and Recovery
Strategies***

Growth Strategies and Diversification Processes as a Response to the Pandemic Crisis: an Italian Multiple Case Study

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Abstract

Objectives: In the wake of the ongoing Covid-19 pandemic, this study aims to investigate the conditions and assumptions that have prompted numerous companies, especially small ones, to undertake important actions to reconvert their business. In particular, the main objective of this paper is to provide suggestions and knowledge that will be necessary in the post-Covid period, in which many of the approaches and business paradigms will be subject to profound changes and new perspectives to be implemented.

Literature review: The occurrence of a crisis is to be understood as a cyclical and non-extraordinary phenomenon that can often occur in business activities (Giacosa, Mazzoleni, 2018). It is therefore possible to state that in modern market economies, corporate crises have become a permanent part of the business operating system (Sirleo, 2009). However, the present crisis is to be considered as the most serious after that of 1929 (Carnazza, Giorgio 2020). The economy of the European area witnessed a contraction of 7.8% in autumn 2020. It is estimated that only at the beginning of 2023, the European states will be able to return to a pre-pandemic economic phase.

Approach/Method: It has been developed a qualitative multiple case study research based on the empirical method of the semi-structured interview, leading the interviewee through very specific questions on topics and salient points, which stimulated the subject to provide well-defined notions and opinions. The study analyzes five small business realities, strongly rooted in their home territories, which have made very courageous choices, undertaking different and particular paths of reconversion of the business.

Findings: The companies analyzed in this work have shown to have an adaptive and resilient strategic approach as a minimum common denominator, which has allowed them not only to survive during the crisis, but to trigger new scenarios and new opportunities to be exploited in the future. The typical reactivity of small and medium-sized enterprises is pushing these realities to seek their own emergency management strategy, breaking away from traditional schemes and betting on something completely new.

Value & Implications: The considerations derived from this study cannot be extrapolated and decontextualized from the emergency in progress, but are presented as methods and examples, if not imitative, but of important reference for future emergency occasions of this magnitude. New approaches and paradigms seem to emerge, based on an adaptive strategy that is indispensable in an unpredictable environment, which require greater flexibility and speed of response.

Keywords – Covid-19 business strategy, Reconversion of business, Emergency management strategy, Organizational resilience, Crisis management

Paper type – Academic Research Paper

1 Introduction

The aim of this study is to examine the assumptions and conditions that have led many companies to undertake important reconversion of their business, in order to cope with the significant changes triggered by the current pandemic scenario. In particular, the focus has been on the different strategic path undertaken by small and medium-sized enterprises which, regardless of the ongoing health crisis, are constantly called upon to make bold and enterprising choices to increase their competitiveness and remain in the market.

In Europe, the Italian panorama has been able to know in the first instance the difficulties generated by the pandemic, proving itself as the first great western country hit by the grip of the virus. In this context, some companies have reacted in the short run by trying to seize the first opportunities, converting plants to the common cause and fighting the virus. From large groups and brands such as Miroglio, Geox, Prada, Valentino and Moschino,

in high fashion, Menarini in pharmaceuticals and Fiat and Ferrari in mechanics, up to small and medium-sized enterprises, everyone wanted to contribute to the production of sanitizing gels, protective masks and lung fans, distorting their paradigms and overcoming the regulatory and bureaucratic difficulties of the Italian system. The world of small and medium-sized industry has thus had to face major changes, not only taking into account the difficulties arising from the ongoing pandemic, but also considering the limited economic capacity.

In this scenario, the main objective of this paper is to provide suggestions and knowledge that will be necessary especially in the post-Covid period, in which many of the approaches and business paradigms will be subject to profound changes and new perspectives to be implemented.

To this end, the work is structured as follows. In the first section, we propose a brief review of the literature on business crisis, crisis management, organizational resilience and leadership. The second section illustrates the research methodology used, the five companies investigated and the results achieved. In the final section, we present the scenarios and perspectives emerged with respect to the study carried out.

2 Managing business crisis through crisis management, organizational resilience and leadership

In all market economies, the life cycle of companies is characterized by a succession of positive and negative situations. In this sense, it is possible to say that the phenomena of company crisis are cyclical and not extraordinary (Giacosa, Mazzoleni, 2018), becoming "a permanent part of the operating system that distinguishes the business activity"³⁴. Specifically, the expression company crisis refers to a condition of serious disturbance of the company's state of health, generally combined with a persistent loss of economic value of the capital and a lack of ability to survive by the company (Pencarelli, 2013). Many scholars, based on the Theory of Value Creation, have historically associated the concept of crisis with the reduction of value of the economic capital of the enterprise. The occurrence of zero or negative increases of the magnitude in question is an indication that the company does not adequately achieve its goal of self-generation over time (Guatri, Vicari, 1994), laying the foundations for the onset of situations of decline or crisis. According to Guatri (1995), it is possible to identify four stages of corporate crises, of which the first two ones are in a phase of decline, while

³⁴ Sirleo G., (2009) *La crisi d'impresa e i piani di ristrutturazione: profili economico-aziendali*, Aracne Editrice, Roma, pp. 15-35.

the remaining refer to an advanced state of crisis. The first phase, called *incubation*, is characterized by the presence of proven economic imbalances due to a possible decrease in revenues, a progressive stiffening in the cost structure, or an excessive burden of debt. The second phase is defined of *maturation* and is revealed with the generation of economic losses, determining an ulterior deterioration of the economic-business performances. At this stage, it is essential to give priority to a rapid containment action, aiming to reduce operating costs and increase revenues before falling into the next stages (Caramagna, 2017). If the action of the company should not be timely and effective, it will have to face the typical phases of the crisis, that is *insolvency* and *instability*. In particular, *insolvency*³⁵ occurs when the undertaking is no longer able to meet its obligations with major and often even irreversible consequences, including the inability to meet deadlines, the loss of trust and credit by the stakeholders, the disruption of the organizational structure and the progressive loss of its customers. This third stage is the prelude to economic *instability*, in which the organization plunges into an advanced state of imbalance, which can be tackled only with structured solutions and healing nature.

One of the crucial skills for those who run the company is therefore to be able to quickly grasp critical situations, correctly identifying the causes triggering the business crisis and the necessary conditions in order to remove them. In general, the decline of the organization and the resulting crisis are never strictly attributable to a single cause, but are the result of multiple triggers. By way of example, it is possible to distinguish between internal and external causes. The latter are usually attributable to changes in macroeconomic scenarios, cultural movements, catastrophic events and industry issues. Although very important, these factors rarely represent the main reason for the crisis, but they contribute decisively to the worsening of the state (Provisiero, 2014). On the contrary, the internal causes, classifiable on a subjective and objective level, represent the main motor of the business crisis phenomena (Sirleo, 2009). The subjective level identifies the crises of a management nature, in which human capital is accused as the cause of the bad performance and failure of the company. However, this type of approach is not exhaustive in that it limits the cause of the crisis to human error alone, failing to grasp the complexity inherent in this issue. For these reasons, it is preferable to adopt an objective approach, according to which a crisis can also arise from events and forces beyond the control of

³⁵ Art. 5 L.F. - "The state of insolvency is manifested by default or other external factors, which show that the debtor is no longer able to meet the obligations regularly" (C.d. civil insolvency).

man. From this point of view, the concept of crisis is therefore linked to instability and changes in the external environment, which are difficult to predict and govern.

In many cases, a crisis is the result of a non-optimal strategic approach and inefficiencies in the corporate structure that can be accentuated by external factors of a cyclical nature. The same signs of decline, which can be traced back to the concept of symptom, are often latent and imperceptible, or do not emerge clearly, delaying the effects of response and possible remedial actions.

In recent years, an important cause has also been found in cyber sabotage and theft of data by third parties against large corporate databases, crucial to the survival of the company. According to this point of view, a crisis should be defined more from the aspect of trauma (hence “traumatic crisis”), than in addition to reappearing natural events, such as earthquakes, pandemics and floods, also include actions of industrial sabotage, product pollution or falsification of quality certifications.

In this context, it is clear the importance assumed by the ability to plan not only the business activity in the strict sense, but also the situations of imbalance and instability that can generate crisis circumstances and put at risk the survival of the company. The concept of crisis management, as an orderly process of activities ranging from crisis forecasting to crisis management, is thus affirmed (Pastore, Vernuccio, 2008), in order to protect the company from threats and reduce its critical impact.

According to Miles and Snow (1978), strategic crisis management approaches can be classified into: (i) a *defensive approach*, which involves behaviour oriented to measures to maintain the efficiency and survival of the enterprise; (ii) an *offensive approach*, which tends to be in the medium to long term and is based on the implementation of new investments and innovations aimed at strengthening the competitive advantage of the company. The first approach involves the adoption of strategies oriented to downsizing measures, such as maintaining efficiency by cutting costs, the sale of some assets and assets not considered more strategic, beyond the reduction of staff. The offensive approach prefers, instead, the use of strategies aimed at implementing renewal programs, both organizational and technological, which, through the entry into new businesses, can lead to the introduction of new products, processes, markets and a new positioning. With these actions the companies are already projected in a later phase (Cesaroni, Sentuti, 2016), in which a negative event turns into an opportunity for growth and strengthening of its competitive advantage in the market.

In addition, the increasing instability of the environment, both socially and naturally, has placed companies in a position to develop capacities to ensure their own operational continuity. In this perspective, the concept of Business Continuity Management assumes a strategic importance, understood by the Italian Institute for the Quality Mark (IMQ) as "ability of the company to continue to exercise its business in the face of adverse events that can affect it"³⁶. This concept is embodied in the definition of an organic plan, specifically called Business Continuity Plan, which collects the different actions to be implemented to address the specific moment of instability. However, in order to cope with the dynamism and turbulence of the environment, it will not be enough to acquire skills and competence in terms of Business Continuity, but it is necessary to have a proactive management structure able to transform unexpected and important critical events for the good performance of the company into important growth opportunities. Specifically, the enterprise will have to demonstrate organizational resilience, which becomes a strategic imperative for the survival of the organization itself. The British Standard Institution (BSI)³⁷ defined organizational resilience as "the ability of an organization to anticipate, prepare, respond and adapt to incremental change and sudden interruptions in order to survive and prosper". In line with this thinking, a resilient organization matures a greater capacity to receive stimuli from the external environment and it develops a timely ability to respond to unforeseeable and potentially destabilizing external events for internal balances (Palumbo, Manna, 2019), identifying structural and management solutions to encourage dynamic adaptation to change. The skills that best describe organizational resilience can therefore be identified in the ability to absorb the shock and preserve the functioning of the organization, to recover from unexpected phenomena, to learn from acquired experience and grow (Weick, Sutcliffe, 2007).

To create a resilient company, Pal, Torstensson and Mattila (2014) highlight the crucial importance of three structural factors, such as: (i) *resourcefulness*, which requires a heterogeneous basket of resources (material, immaterial, relational and social) to be able to put quickly in the field when sudden and unexpected situations arise, that require immediate intervention by the organization (Weick, Sutcliffe, 2007); (ii) *dynamic competitiveness*, which presupposes the ability of the company to feed and renew over time its specific assets, focusing on organizational flexibility, on

³⁶<https://www.imq.it/it>, Certification Management Systems for Operational Continuity Standard BS 25999-2, IMQ - Italian Institute for the Quality Mark (last access: 28/09/2021).

³⁷ See BSI.group, www.bsigroup.com (last access: 28/09/2021).

the plurality of sources of competitive advantage and on the enhancement of inter-organizational relations, that are decisive for catching timely signs of environmental change (Palumbo, 2016); (iii) *learning-culture oriented*, which becomes indispensable to foster the strategic and structural flexibility of the organization, that allows the company to develop an adaptive response to the external environment and to stimulate the proactive change of procedures and practices within the company (Chu, Smyrniotis, 2018).

In addition to the structural assumptions described above, a key role is played by the figure of the leader who has the great responsibility to guide the entire corporate apparatus towards the achievement of common and shareable objectives. In particular, the resilient leader must succeed in transmitting the cornerstones and constituents of the organization, acting as a catalyst that encourages virtuous behaviour and conforming to change and operation (Cantoni, 2014). For this purpose, it is essential to adopt a leadership style geared towards building an empathic relationship with the various stakeholders, regardless of the type of crisis that needs to be faced. A leader who leads the company using a hierarchical approach only risks facing problems in a superficial and ineffective manner, especially during highly unstable phenomena in which information and knowledge are poorly accessible. The solution could be the definition of a dedicated working group, in order to create a feeling of involvement and membership among the various members of the organization, key elements to promote a climate of openness and readiness to change that make the organization resilient and sustainable in the long term (Moran, Tame, 2012).

A well-founded corporate culture, good dynamic management of resources and strong leadership are therefore essential factors to create a solid and well-structured organizational resilience.

The current health and socio-economic crisis, triggered by the spread of the SARS-Cov-2³⁸ virus on a global scale, has significantly accelerated the awareness of companies about the importance of the concepts of crisis management and organizational resilience. The infection with SARS-Cov-2, universally known as Covid-19, occurred in China between the end of 2019 and the beginning of 2020, assuming in a few weeks the proportions of a global pandemic due to the high contagion. The containment measures put in place by national governments to prevent the collapse of health

³⁸ The SARS-Cov-2 virus (Severe Coronavirus-2 Acute Respiratory Syndrome), named by the International Committee on Taxonomy of Viruses (ICTV), causes the disease commonly called Covid-19, where “Co” means Corona, “vi” means virus, “d” means disease and “19” indicates the year in which it first occurred. Covid-19 was declared a global pandemic by the World Health Organization (WHO) on 11 March 2020 (www.salute.gov.it, last access: 01/10/2021).

structures, has generated inevitable and significant economic and social repercussions. Although it allows to reduce the transmission of contagion, lockdown in fact has determined constraints on the mobility of individuals, closure of schools, universities and public buildings, closure of commercial and tourist activities and non-essential services, reduction or reorganization of productive activities, quota of import and export activities (Consob, 2020). The economic and financial consequences of these restrictions were immediately very severe, leading to an unprecedented recession. According to Carnazza and Giorgio (2020), the present crisis is to be considered as the most serious after that of 1929. It simultaneously encompasses the causes of the three previous recessions: demand crisis, as in the 1930s, supply crisis, which characterized the seventies with the quadrupling of oil prices, and, finally, the financial crisis, such as that of the recent years 2008 and 2009, still not fully exploded, but which has already shown signs of nervousness with strong falls and market fluctuations.

The economy of the European area witnessed a contraction of 7.8% in autumn 2020, while growth of 4.2% is expected in 2021 and 3% in 2022. It is estimated that only at the beginning of 2023, the European states they will be able to return to a pre-pandemic economic phase.

A health disaster like Covid-19 had the power to quickly redefine the culture of an organization, completely revolutionizing the organizational, productive, communicative and marketing assets³⁹.

From the above, there is no doubt that the crisis is the most serious threat to the company's survival and necessarily requires radical and costly changes in its strategy and structure. While maintaining this negative meaning, it is nevertheless necessary to stress that crises often represent the prelude to new trends and can be transformed into important growth opportunities. By way of example, the Covid-19 pandemic has given greater concreteness and impetus to phenomena already on the rise, such as innovation, digitization and sustainable development.

Businesses are therefore faced with a huge challenge, which requires the development of specific skills and the definition of policies and strategies, oriented to a proactive and dynamic management of unexpected environmental changes, with the ultimate aim of ensuring the survival and competitiveness of the company itself in the short, medium and long term.

3 Research Methodology

³⁹<https://www.ipsoa.it/>, *Coronavirus: cosa devono fare imprese e professionisti*, IPSOA – March 2020 (last access: 01/10/2021).

In order to analyse the assumptions and the conditions of context that have driven many enterprises to adopt important strategies to reconvert their business in response to the pandemic crisis as well as the trends and the developments that they derive, it has been developed a qualitative multiple case study research based on the empirical method of the semi-structured interview. Specifically, the study analyzes five small business realities, operating in the Italian manufacturing sector, which have made bold managerial and strategic choices to survive the change imposed by the pandemic scenario. Given the complexity of the subject under investigation, it was decided to use the semi-structured interview as this method of analysis allows to explore in depth the proposed topic and to identify all the ways in which the subject relates and lives its experience, giving adequate space to the interviewee's digressions and additional arguments.

In the case studies, open questions were used with respect to the issues investigated, which allowed to encourage the reflections of the interlocutors starting from personal experiences and not from theoretical and ideological statements. In this context, the interviewer tried to keep a low profile to give the interviewee the opportunity to develop his own way of conceiving the reality analyzed and his own methods of evaluation, while still remaining sufficiently focused on the subject of interest. In particular, the interviews were constructed following a flexible scheme to explore and understand the difficulties encountered, the strengths that have made possible a rapid conversion of activities, the opportunities that have opened up and led the companies investigated to hire a new organization with a new target to serve and with new skills to introduce, or strengthen, for the future.

The objective pursued is therefore twofold: (i) to deepen the factors and circumstances that led the realities examined to convert and adapt their production, entering the business of the material of prevention and protection against the virus; (ii) mark the trends and developments that these companies will have to follow in order to build a lasting and defensible advantage over time, responding accordingly to the emerging needs of a consumer who lives in a "next new normal" context.

3.1 Case studies

The research focused on five entrepreneurial realities, strongly rooted in the territory to which they belong, that have decided to face the change in existence, entering in the market of the devices of prevention and protection from virus SARS-Cov-2. They differ in terms of know-how, equipment and infrastructure, but above all in terms of levels of innovation and digitalization, which have given rise to different and peculiar paths of business conversion.

*Il Ghiro Materassi*⁴⁰. It is a small company based in the province of Sassari and operates throughout the Sardinian territory, through a network of seven sales outlets. For over fifty years, the company has been present in the world of Bedding craftsmanship, renewing its products with innovative and cutting-edge solutions. In particular, the company specializes in the production of mattresses, with three lines: nets and sommier, pillows and accessories. During the health emergency, the Ghiro started a production of community masks⁴¹ in washable fabric, using art. 16 paragraph 2 of the Decree Law of 17 March 2020. Precisely, the types of masks made are two, such as the model "Sardinia" produced entirely by hand and the model "Beta" electro-welded finish. In a second moment, the production has also been extended to the accessories stop-masks and anti-fog, specially designed to meet the needs of those who wear lenses from sight and sun. Despite the difficulties related to inexperience in the field of thin and smooth masks and elastic materials, the company has succeeded in its intent and has made a million masks based on its production, largely artisan, on the use of samples "model paper". Initially, these products were donated to hospitals and associations and only subsequently marketed through the sales channels of the company concerned. Specifically, the distribution of the product took place through participation in public tenders and exploiting the sales outlets located throughout Sardinia. In addition, the company has developed on its website a section called "Il Ghiro Life" specifically dedicated to the advertising and sale of masks and related accessories, thus underpinning its capabilities in terms of product diversification and communication.

*Idea Plast S.r.l.*⁴². The company, based in Lainate (MI), was founded in May 2000 as an evolution of the Studio Tecnico Trentini Alessandro founded in 1987 for the design of molds and plastic articles. In response to the growing focus on green issues, Idea Plast focuses on the development of services and solutions for the recycling and reuse of plastic components. In March 2020, the company responded to the crisis caused by the outbreak of the Covid-19 pandemic not through a conversion of its business in the strict sense, rather integrating its own production with new lines of plastic products such as office paraphernalia and dispensers for sanitizing gels, essential in all workplaces and public transport to ensure social distancing

⁴⁰ <https://ghiomaterassi.it/>.

⁴¹ In accordance with Article 16 paragraph 2 of the DL of 17 March 2020, community masks are intended to reduce the circulation of the virus in daily life and are not subject to particular certifications. Neither medical devices nor personal protective equipment should be considered, but a hygienic measure to reduce the spread of SARS-COV-2 virus (www.salute.gov.it, last access: 08/10/2021).

⁴² <https://www.ideaplast.com/>.

and continuous sanitization. One of the managers of the production area said, in fact, that it was not necessary to twist the logic of production, since all the skills and initial equipment were already available on site. Rather, the main difficulties encountered concerned the availability of materials, which were deficient due to the import ban and high demand from suppliers and, the use of a new material, that is the polycarbonate, more suitable for the realization of dividers and dispensers, but out of the ordinary logic of the company. In addition, the company has found itself implementing completely new distribution techniques, as well as having to serve customer segments never intercepted before. For example, important public transport companies, such as taxis, have constantly sought advice and coordination with Idea Plast, for the construction of custom-made paraphernalia to be inserted in the cars, so that there was sufficient protection for conductors and passengers. The company in question has also had to implement new communication strategies that have substantially translated into advertisements on social platforms and pop-up on the company website.

*SIC Società Italiana Cosmetici S.r.l.*⁴³. The company was founded in Milan in 1966 by Raffaele Piazzolla who had the intuition to create solutions and products designed specifically for the well-being and beauty of hair in a unique period like that of the 70s, where fashion, body care consumption and social renewal begin to catch more attention. Today, it is Roberto Piazzolla who leads the company with a constant look to the future, thanks to the adoption of a policy aimed at change and continuous renewal. SIC products are entirely made on Italian territory and with a particular attention to the environment and technology, witnessing a strong focus on management conscious in terms of sustainable development. Specifically, the company is present on the cosmetic market with two brands. The first, FISLIC, is a technical brand dedicated to fashion, color and the professional world of hair stylist. The HAIRMED brand, on the other hand, was launched in 1999 for the care of the hair at 360 degrees and is aimed at all those who have a particular attention to the health of their scalp. The Lombard company is characterized by a great predictive vision; it, in fact, has launched its own line of products for the hygiene of the hands already with the advent of the first SARS at the beginning of the century. In particular, the launched line takes the name of MYCLEANMED and totally reflects the values of well-being and personal protection embodied by the company. The products of this line, sold in three sizes, have an effective sanitizing action not only on the hands, but also on the surfaces.

⁴³ <https://www.hairmed.it/>.

The main difficulties encountered by the company in dealing with the pandemic crisis can be summarized in: (i) the repositioning of the target; (ii) the management of communication strategies with particular reference to B2B, where the dialogue with pharmacies and wholesalers of stationery and bookshops has been unusual, characterized by distant logics compared to the core business that generally tend to satisfy.

*Distilleria Nardini*⁴⁴. Born in 1779 in Bassano del Grappa from the work of Bortolo Nardini, is the most ancient distillery of Italy and boasts the first production of grappa. Since then, the company has been producing high quality grappa and liqueurs that incorporate respect for tradition and attention to innovation, thus becoming the icon of Italian distillate in the world.

In March 2020, in the midst of a health emergency, the company decided to develop a gel brand Nardini with sanitizing solution in a pocket spray at 79 degrees, while facing the significant shortage of bulk alcohol on the market and the decline in demand found in its core business, as a result of the containment measures implemented by the government. Specifically, there are two products made by the company, namely the N-gel grappa hand cleaner and the hand cleaner spray flavoured with cedar oil. As stated by the director manager Tonini M., the N-gel is the rupture product of the company that comes out of the usual patterns, with which the company has become fully aware of a new normality from which will inevitably arise different needs that must be promptly grasped. In accordance with article 16, paragraph 2, of the D.L. of 17 March 2020, the company Nardini has decided to also produce masks of community, that reproduce the name and the imagination of the bottles of liqueurs made and marketed by the distillery, that is the mask "Mezzo and Mezzo Nardini", that "Bitter Nardini", the "Amaro Nardini" and finally, the mask "Acqua di cedro Nardini". Although the company is aware that sanitizing gels and masks will be increasingly in common use, their goal remains to provide a product at the same time unusual and distinctive, easily recognizable and youthful, trying to convey an identity message even in this moment of absolute emergency. The strategic manoeuvre of the Venetian enterprise can substantially be enclosed in a good planning, that has found a decisive qualitative advantage in the synergies established with important production partners, thus integrating with the excellent marketing skills in terms of distribution and communication.

⁴⁴ <https://www.nardini.it/>.

*ModaImpresa S.r.l.*⁴⁵ The Molise company, located on the outskirts of Isernia, was born from a project of auto entrepreneurship on the ashes of the former company Ittierre, headed by Longway Investments. The company, with its 30 employees, is an ideal partner for other companies in the fashion sector that aspire to develop "turn-key" projects or need one or more outsourcing services. In particular, ModaImpresa provides its customers with an integrated service offering, thanks to a wide range of skills ranging from product to graphic design, from modelling to e-Commerce management and social networks, from customer service to logistics. The choices made by the Molise company in the Covid-19 era, proved to be effective and successful. First, ModaImpresa has completely reconverted its production, stopping the core business of clothing, to realize 200,000 masks to be allocated to hospitals and associations and then to be marketed to the rest of customers. The strategy adopted made it possible not to stop production and to achieve important economic objectives, although it was marked by a continuous "working on the field" and by no preparatory and planning activities. In addition, the company had the intuition to produce colourful masks and in tune with the clothes of their own realization. The new production has determined important changes in the organizational structure of the enterprise itself. In the midst of the pandemic, in fact, the company saw the birth of ModaImpresa Care, a new vertical business unit engaged in the production, distribution and communication of personal protective equipment. The decisions and actions implemented by the company all aim at a quantitative, qualitative and relational growth, through the acquisition of a greater market share and the consolidation of its position in the Made in Italy fashion sector.

3.1.1 Findings

The pandemic scenario has placed small and medium-sized enterprises (SMEs) at a fundamental crossroads: facing recovery by remaining faithful to established business paradigms over time, or using the crisis to ride an evolutionary wave and embrace change. The enterprises analyzed in this work have chosen to undertake the second path, trying to implement processes of change and experimentation, with successful and unsuccessful results depending on the strategy and vision adopted. They have shown to have an adaptive and resilient strategic approach as a minimum common denominator, which has allowed them not only to survive during the crisis, but to trigger new scenarios and new opportunities to be exploited in the future. The characteristic that instead distinguishes the operational contexts

⁴⁵ <https://www.modaimpresa.com/>.

analyzed concerns the time horizon of action, which ranges from the short to the long term depending on the future vision of the market and its development potential. In order for a stable recovery phase to begin, however, the study undertaken suggests to companies the need to develop greater awareness of three main areas, such as: (i) *the ability to plan, innovate and risk management*; (ii) *internationalization and partnership*; (iii) *digitization and sustainability*.

The medium and long-term strategies adopted by the investigated companies have certainly moved in this direction, focusing mainly on the development of alliances, internationalization processes, digitalization and risk management. Projects based on collaboration and strategic partnerships have proved to be very successful, as certain skills have been sought in other contexts and integrated into their own production logics. This is the case of ModaImpresa which, in parallel to the production of new masks, has undertaken important research and development with the Department of Medicine and Surgery of Molise for the design of special containers with sanitizing and cleaning action, in which to store your mask. In a similar way, the Nardini company has resorted to important supply agreements with chemical and cosmetic laboratories in the area to remedy the lack of proper authorization and internal skills, essential to produce its sanitizing gel. Although the pandemic has called into question the main paradigms of globalization and interconnections between the various supply chains, the internationalization of companies cannot be seen as a limiting strategy, but as a means to implement in order to better face future challenges and return to pre-Covid operating levels. In this regard, the Molise fashion company has developed important international collaborations with Swiss organizations to produce the so-called "Viroblock" masks, which are characterized by the particularly protective and innovative fabric. This cooperation allowed ModaImpresa to sell more than 10,000 models as personal protective equipment (PPE) and their CE marking, broadening its horizons and exceeding the limits related to small size and excessive market dependencies.

In relation to digitization processes, this study showed that all companies had at least implemented e-commerce platforms even before the outbreak of the pandemic, indicating that a path of innovation and digital renewal was already underway. However, the coronavirus pandemic has significantly accelerated digital transformation, prompting businesses to reorient their business models to meet new emerging needs. People have appealed to online channels to make up for the many impediments caused by social distancing measures, thus maturing a series of expectations that have increased the desire to try increasingly different and more performing

experiences. In this sense, the company ModaImpresa has created an e-commerce exclusively dedicated to the sale of healthcare products, building a company website ad hoc. The choice was also dictated by the desire to keep the business of masks and protective suits distinct from the core clothing, creating a real subsidiary called "ModaImpresa Care". The *Nardini Distillery*, on the other hand, has used the mechanisms of digitization to communicate and market on its company website the line of healthcare products, specifically designed to demonstrate the proximity to its business partners and customers in the Covid era. Particularly interesting is the communication strategy adopted to advertise the detergent gel hands to grappa N-gel, as the company deliberately recalls the tradition in providing instructions on how to use the product. On the site of the Nardini Distillery, in fact, it is explicitly indicated that the cleaning gel "*should be rubbed on the hands until they are completely dry obtaining a quick sanitizing action. This simple gesture, now almost natural and surely fundamental for the safety of all, refers to an ancient tradition that wanted the grappa rubbed on the back of the hand to evaluate the quality and freshness of the pomace based on the aroma released*".⁴⁶ However, the expensive products of the Nardini Distillery have been included in a generic page "Gift Packaging", which gives them little visibility. It would therefore be desirable, for the future, to create a space dedicated to healthcare products that would enhance their specificity.

The pandemic also demonstrated how important it was to have resilient internal logics, supported by good risk management planning. The survey carried out reveals that the flexibility and personal dialogue typical of SMEs have made it possible not to trigger self-destructive and damaging logic, not only for the corporate image, but also for internal serenity. In particular, the CEO of the company SIC S.r.l. stressed the importance of the leader and human resources in periods of uncertainty. Especially in small-scale situations, the leader has the crucial possibility of establishing a climate of awareness and trust, which allows to manage the crisis situation promptly and with the support of all employees.

The uncertainty, heightened by the partial and fragmentary governmental directives, has highlighted even more the importance of having adaptive capacities that allow an organization to respond to change, managing and transforming adverse situations into opportunities. As stated by Modaimpresa CEO Romolo D'Orazio, the resilience must be an inherent characteristic in the companies, as if to indicate a cultural heritage and a

⁴⁶ <https://www.nardini.it/>.

living one, typical of those realities that operate in particularly disadvantaged areas such as the hinterland of central southern Italy.

It is therefore possible to affirm that the study has evidenced as the realities of smaller dimension enjoy of a flexibility and a rapidity of action such to succeed quickly to reshape and to reorganize own business and the own organizational systems, using digital technology and sharing their know-how with other companies for the development of winning solutions, thanks to the integration of different skills and degrees of specialization.

4 Conclusions

The considerations that follow the study are intended to contribute to enriching the literature on crisis management, which, despite its breadth and depth, has clear shortcomings on the specific front of pandemic crises. Although such reflections cannot be extrapolated and decontextualized from the current emergency, they are presented as modalities and examples of important reference for future emergencies of such magnitude. Mintzberg's (1994) theories on the ability of companies to develop strategic thinking, reinforcing the so-called concept of emerging strategy, find full application in the case studies examined. Companies would never have planned such a conversion of production, if they had not had an intuition dictated by the necessity of the moment and the critical phase in which they were in. However, new approaches and new paradigms seem to emerge, based on an adaptive strategy that becomes indispensable in an unpredictable environment and subject to increasingly shorter cyclical phases, which require greater flexibility and speed of response.

The case studies have identified a highly reactive and resilient Italian economic and social fabric which, if adequately supported, it could guarantee higher levels of competitiveness, especially with regard to more developed foreign companies and benefiting from the legislation.

The choices made have relied mainly on a technical equipment and know-how already existing, which has ensured great flexibility and responsiveness of intervention. Even in the absence of affinity in the production chain, the relations developed between not typical realities of their business have been found critical. These processes led to internal reorganisations and an expansion of its product portfolio, as new communication and distribution formulas were necessary to place and effectively position the new solutions on the market. The companies investigated have also shown that they are able to face the current critical and emergency, finding new solutions and innovating their processes and activities, becoming witnesses to a fervent, innovative and courageous Italian entrepreneurial vitality. A parallel risk

management planning, together with the strategic one, is however necessary, also and above all in the small and medium enterprises, where the figure of the leader covers a particularly important role, above all in the emergency's phases. The typical reactivity of small and medium-sized enterprises is pushing these realities to seek their own emergency management strategy, breaking away from traditional schemes and betting on something completely new.

Ultimately, it can be said that from particular emergency situations and risks, new opportunities and innovations can arise, ready to become part of a new normality that future generations will be called to live and businesses to seize.

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Managing small firms during the Coronavirus pandemic: A survey on the Italian medical devices industry

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Abstract

Beyond the disastrous impact on human health all over the world, the COVID-19 pandemic also caused a major economic crisis, with the block of manufacturing activities in a large number of affected countries, the collapse in consumer demand and the negative response of financial markets to the more intense uncertainties of the business environment. In this context, small and medium-sized enterprises (SMEs) have been exposed to various difficulties by the coronavirus pandemic with potential stronger effects as these companies generally operate in an environment characterised by scarce resources. For this reason, the pandemic is a challenge for SMEs as it may compromise their operations and performance. In addition, the vulnerability of SMEs had relevant social negative effects especially when those companies operating in critical sectors such as the medical devices industry. In fact, several countries, including Italy, experienced a dramatic shortage of medical and Personal Protective Equipment (PPE) in the early phase of the pandemic slowing down the control of the infection and creating huge difficulties to the population and stress for the national health services. This main objective of this paper is to investigate the impact of the Coronavirus pandemic on the Italian medical devices sector. To achieve this objective a questionnaire survey was developed on summer 2020 involving 64 Italian medical devices companies. The main findings indicate that several business areas were negatively impacted by the pandemic and, among these; logistics management suffered the greatest disruptions. About the impact of pandemic on supply chain resiliency, the vast majority of the respondents stated that it was rather low regardless of the company size. The ability to predict changes in the business environment is limited and risk management is generally underestimated. Finally, the results concerning the impact of the pandemic on future supply

chain developments indicate that small firms leverage existing technologies and competencies in existing supply chain processes.

Keywords - Coronavirus (COVID-19) crisis, Small and medium-sized enterprises (SMEs), Medical devices industry, Resiliency, Risk Management

Paper type - Academic Research Paper

1 Introduction

In recent years, an increasing number of disastrous events have caused significant damage and economic losses all over the world and had a particular negative impact on the business sector (Ratten, 2002). The effects of these events include destruction of property and equipment, damage to stock, loss of revenue from business interruptions and rising operational costs (Segal and Gerstel, 2020). The loss in market share due to clients changing to competitors, movement of skilled workers and impaired relationships with suppliers and retailers can affect long-term competitiveness or even lead to bankrupts.

The health emergency caused by the COVID-19 pandemic had - and still having - a strong impact on companies of all sizes and operating in all sectors including small and medium-sized enterprises (SMEs). In many countries, SMEs represent more than 95% of all businesses, which illustrates their key role in the global and local economy. Such companies are particularly vulnerable to these events as they often show a low investment level in disaster resilience and risk management, SMEs are often part of international supply chains, which means that business interruptions of SMEs due to local disasters can have an impact on markets and enterprises in other regions or continents. Then the risks associate to catastrophic events are not limited to single companies, sectors or industries, but can have serious impacts on the entire supply chains.

The participation in international supply chains and the outsourcing of manufacturing activities to the low-cost countries may be a possible explanation to understand why the COVID-19 pandemic has caused severe problems and disruptions for SMEs around the globe. This strategy increased the complexity and the number of actors in supply networks providing the expected cost and efficiency benefits. On the other hand, this strategy increased the risks of failure and disruptions. The repercussions of

the COVID-19 pandemic on SMEs might lead to long lasting structural effects with the potential to reconfiguring global supply chains in certain industries, accelerating re-shoring and/or near-shoring strategies, as well as diversification of suppliers.

As a result of the COVID-19 pandemic, severe disruptions (e.g., manufacturers closed or partially closed, airports operating with harsh restrictions, shortages of medical equipment and supplies) were recorded in global supply chains and in a number of industries (automotive, electronics, consumer goods, medical devices, etc.). In this context, resiliency and risk management have increasingly been considered as competitive factors to the extent that investments in these areas may reduce the damage and losses by SMEs, strengthen competitiveness and secure work places in the long term. The challenge for these companies is to make supply chains more resilient without compromising their competitiveness.

In the medical devices industry, the COVID-19 pandemic led to major disruptions, causing dangerous shortages of devices and products. Italy suffered a lot from the impact of the pandemic since there was a dramatic concern regarding the shortage of masks, gloves, gowns, and ventilator machines during the first half of 2020. This put the national health-care systems under pressure and caused relevant troubles to the population.

The objective of this paper is to provide insight on the impact that COVID-19 pandemic on the Italian medical devices sector. To achieve this objective, a survey was conducted during the summer 2020 involving 64 companies. The results shed light on the following elements: i) the business areas that suffered the most critical disruptions, ii) the impact of pandemic on supply chain resiliency and risk management, and iii) the influence of pandemic on future supply chain developments.

This paper is organised as follows: section 2 provides a short overview of the literature on resiliency and risk management in SMEs. Section 3 describes the methodological approach adopted. The main survey results achieved are summarised in section 4. The discussion of results and related implications for both research and practice have been outlined in the final section.

2 Theoretical background

There is a consensus in the business literature that SMEs generally have difficulties in facing the effects of economic crises (Latham, 2009; Michael, Robbins, 1998). Generally, this is due to the lack of financial resources and the high cost of business capital (Domac, Ferri, 1999). In addition, in these companies there are low administrative and technical capabilities

(Demirgüç-Kunt et al., 2005). All the above factors provide reasons why SMEs suffers the negative consequences of economic crises in comparison with other companies (Robbins, Pearce II, 1993).

Hence, the health and economic crisis unleashed by the COVID-19 pandemic may has devastating effects on SMEs because of the relationships with customers or suppliers are vital elements for these companies (Nugent, Yhee, 2002).

Published research with a managerial approach on how SMEs is responding to the effects of pandemic to ensure business performance have generally analysed such effects separately (Gerald et al., 2020; Guo et al., 2020; Sobaih et al., 2021). Guo et al. (2020) explored the use of digital technology by SMEs to face the effects of the pandemic. The result highlight the importance of digitalisation for improve the SMEs responses to the pandemic crisis. On the other hand, Gerald et al. (2020) noted that argued that improving agility capabilities of SMEs may mitigate the negative effects of the pandemic company's performance. Another example is the study carried out by Omar et al. (2020) on the use of financial and marketing strategies to overcoming the crisis triggered by the pandemic. The findings indicated that SMEs pursued long-term, rather than short-term strategy to achieve sustainable performance. However, the effects of these strategies on SMEs' long-term performance and their potential for improving efficiency needs further study.

However, there is a dearth of research focusing on supply chain practices undertaken by on SMEs to survive to COVID-19 pandemic. The COVID-19 pandemic has created substantial difficulties to SMEs and will have long lasting structural effects on the reconfiguration of global supply chains, the acceleration of re-shoring and/or near-shoring strategies as well as diversification of suppliers in this area. In this areas, severe disruptions (e.g., manufacturers closed or partially closed, airports operating with harsh restrictions, shortages of medical equipment and supplies) have been recorded (Ivanov, 2020; Reuters, Cal/Amp, 2020). As a result, SMEs operating in a number of industries (e.g. automotive, electronics, consumer goods, medical devices, etc.) suffered negative effects.

To face such negative effects, the management efforts should be directed to make supply chains more resilient without compromising their competitiveness. This is not very easy objective to achieve because many SMEs are not prepared to face catastrophic events and then they do not have formal risk management plan in place to respond to supply chain disruptions caused by the COVID-19. A reaction often adopted by many companies is to focus on building inventory, which may act as a buffer to prevent future disruptions in the supply chain (Simchi-Levi, 2020; Dohale et al., 2021).

Nevertheless, this reaction generally causes the accumulation of stocks with increasing costs and supply chain inefficiency. The need of building resilient supply chains that are able to better resist to the impact of vulnerabilities is a key element in recovering from supply chain disruptions caused by the widespread of pandemic (WEF, 2020).

The lack of emphasis on resiliency and risk management may be one of the possible explanation why the coronavirus has caused severe problems and disruptions for SMEs. On the other hand, the widespread effects of the pandemic means that different strategies and actions are required in different situations; one potential strategy involves robust supply chain resilience (Chen et al., 2019), which redirects flows of materials within the supply chain and creates adapted structures for ensuring continuity in operations (Zhao et al., 2019).

Despite studies have shown that SMEs are dealing with several difficulties and challenges due to the COVID-19 pandemic, the impact of a pandemic on SMEs' supply chain resilience and risk management remain unexplored. For this reason, more research on how small firms faced supply chains disruptions due to catastrophic events like COVID-19 (Yu et al., 2019) is needed.

This is particularly true in the medical device supply chain, where the shortages of medical and personal protective equipment contributed to the widespread of the pandemic that contributed to create a worldwide health crisis and damaged to the global economy (Iyengar, et al., 2020).

3 Methodological approach

The method adopted for this research was quantitative in nature and based on a questionnaire survey. The survey was organised and implemented into three sequential steps. In the first step, the authors defined the content of the questionnaire and the different questions were derived from their earlier research experiences and the extant literature. In the second step, the draft questionnaire was tested through a number of online chat with managers working in medical devices companies. The objective was to obtain a feedback on the appropriateness of the objectives of the study and the clarity and readability of questions. The scope of the questionnaire ranged from how COVID-19 affects different company business areas and its supply chain to the influence on resiliency and related supply chain disruptions caused by COVID-19 and risk management practices and finally how pandemic will influence supply chain in the future. In the third step, the survey was launched during the summer 2020 using a web-based platform.

The survey investigated the following three elements:

- i) the company's business areas that suffered the most critical disruptions,
- ii) the impact of pandemic on supply chain resiliency and risk management,
- iii) the influence of COVID-19 on future developments of supply chain activities.

The questionnaire was submitted to 384 companies and 64 valid questionnaires were received in total. The demographic information of the 64 companies is shown in table 1.

The vast majority of the companies participated in the survey were small and medium sized firms (52 companies out of 64 equal to 81.3% of the total sample).

Tab. 1 - Respondents by company size and industry segments

Respondents by company size			Respondents by industry sectors		
<i>Employee bands</i>	n.	%	<i>Industry sectors</i>	n.	%
Micro/Small (1-49)	33	51.5	Medical devices	16	25.0
Medium (50-249)	19	29.8	Biomedical technology	3	04.6
Large (more than 249)	12	18.8	Services and software	4	06.3
Total	64	100	Lab. test and <i>in vitro</i> diagnostics	12	18.8
			Unknown	29	45.3
			Total	64	100

Most of the respondents covered top management positions (46.8%), while the rest were almost equally distributed between those covering middle management positions (29%) and operational tasks (24.2%). Moreover, most of them covered these positions for 5 years (35%) or 10 years (28%) time.

The medical-device industry was selected because the COVID-19 pandemic triggered unprecedented increased demand for some medical devices (e.g., masks, gloves, gowns, ventilator machines) and caused significant disruptions to global supply chain operations.

The medical device companies were under two different pressures at the early stage of the pandemic. On the one hand, many companies in the sector

faced a dramatic increase in the demand of personal protective products and other medical devices. On the other, there was a lack of availability of these products due to disruptions in the supply chain caused by the block of factories in China and other South-East Asian countries. In addition, the distribution of products on the domestic market became more complicated due to the mobility restrictions introduced by the government to stop the contagion. In this scenario, many companies have shown considerable vulnerability due to a failure in predicting and managing risks and a lack of visibility into all levels of their supply chain.

In Italy, there was a significant concern regarding the shortage of critical one-time-use PPE, particularly in the northern part of the country, during the early phases of the pandemic (Aldighetti et al., 2019).

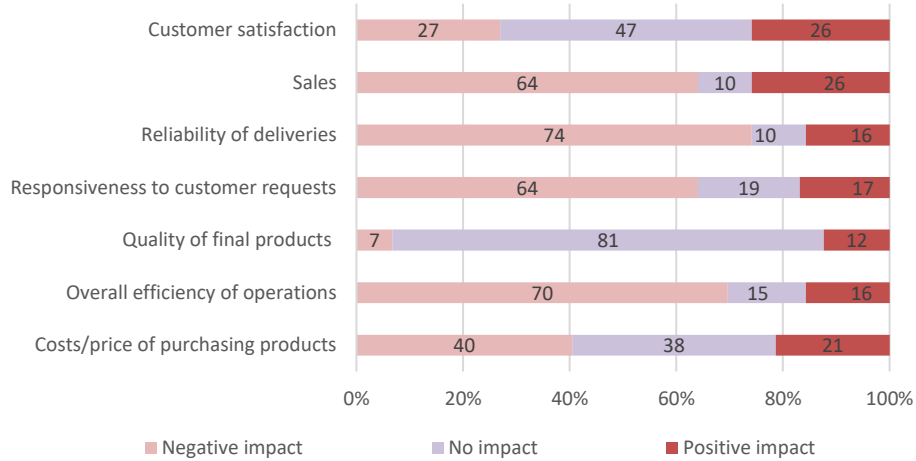
4 Main survey results

This section illustrates the main results obtained from the questionnaire survey and each of the section below provides details about the three main areas investigated by the survey.

4.1 The impact of the pandemic on business areas

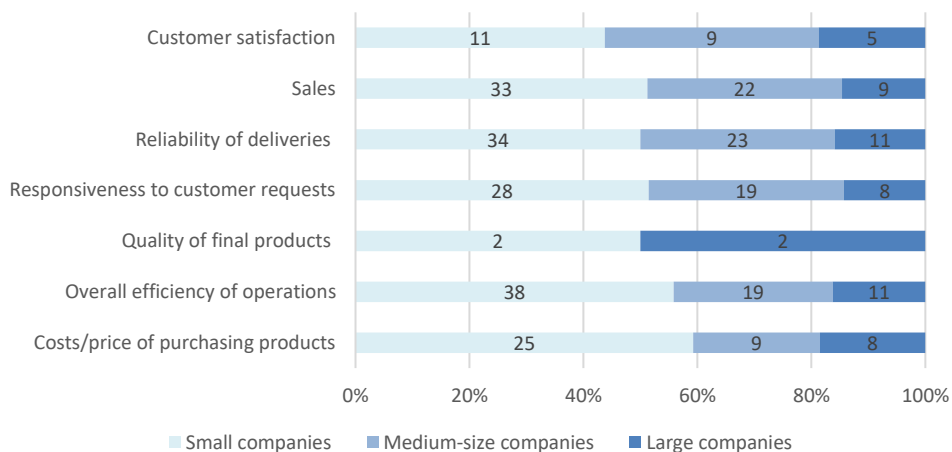
The impact of the pandemic on different business areas was the first element analysed by the empirical survey (see Figure1). The analysis was performed taking into account three different level of impact (no impact, negative impact and positive impact). The data collected shown that the business areas most negatively affected by COVID-19 were delivery reliability (74%), overall company efficiency (70%), the company's ability to respond to customer demands (64%) and sales (64%). Interestingly, three out four o the above business areas are related to the management of logistics (delivery reliability, responsiveness to customer and sales).

Fig. 1: COVID-19 impact on company's business areas



Considering the size of the surveyed companies and the responses related to the negative impact only (see Figure 2), it emerges that small and medium sized companies (SMEs) were particularly affected by the pandemic. With particular reference to small firms only, 38% suffered negative influence in relation to the overall company efficiency, 34% in relation to delivery reliability, 33% in relation to sales and 28% in relation to responsiveness to customer requests.

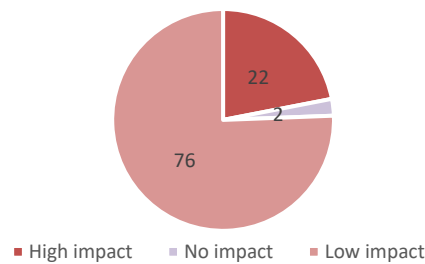
Fig. 2: COVID-19 negative influence on business areas by company size



4.2 The impact of the pandemic on supply chain resiliency and risk management

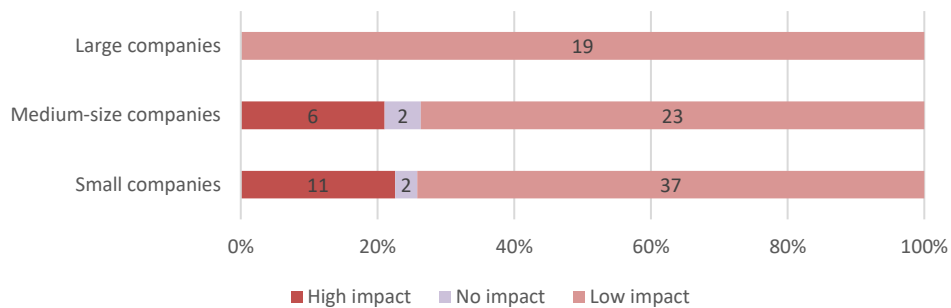
Before to consider supply chain resiliency, the impact of COVID-19 on the supply chain was analysed (see Figure 3). Most of the respondents stated that the overall impact of the pandemic on the supply chain was high (76%). A limited number of companies indicated that such an impact was low (22%), while very few companies declared that the pandemic had no impact on their supply chain (2%).

Fig. 3: The overall impact of the COVID-19 on the supply chain



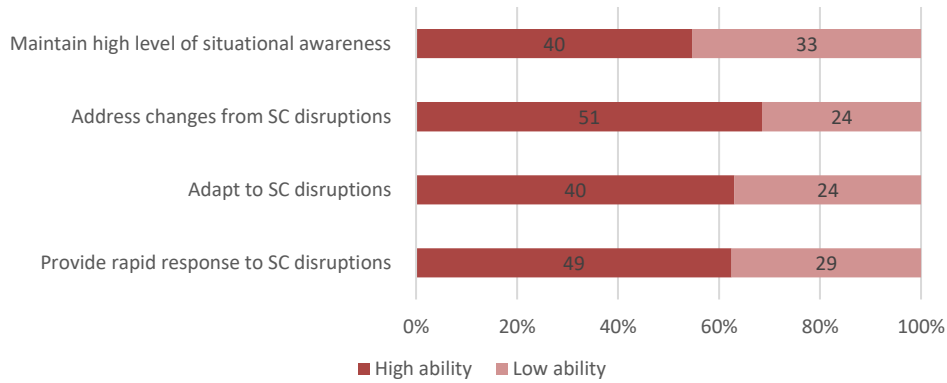
The same issue was analysed from the company size point of view (see Figure 4). Data evidenced that for all three type of companies, the impact of the COVID-19 on the supply chain was generally low. Only some small and medium sized firms perceived a high impact (11% and 6% respectively).

Fig. 4: Impact of the COVID-19 on the supply chain by company size



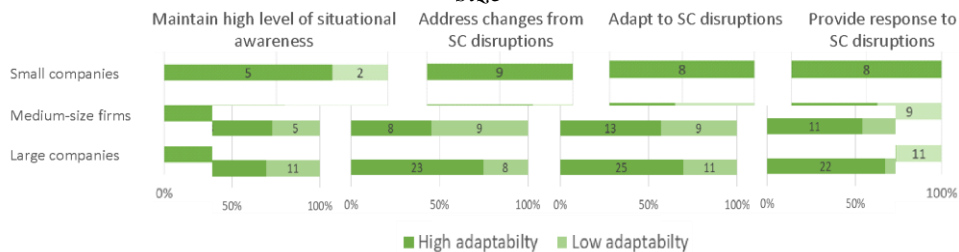
In relation with the ability to face supply chain disruptions caused by COVID-19, the data provided in Figure 5 shown that the number of companies reported high ability to face supply chain disruptions is higher than those that reported a lower level of adaptability.

Fig. 5: Adaptability to COVID-19 supply chain disruptions



Considering the company size (see Figure 6), SMEs shown a lower level of ability to face supply chain disruptions in the case of maintaining a high level of situational awareness. On the other hand, large firms show the highest level of ability when addressing changes and providing a rapid response to supply chain disruptions.

Fig. 6: Adaptability to COVID-19 supply chain disruptions by company size



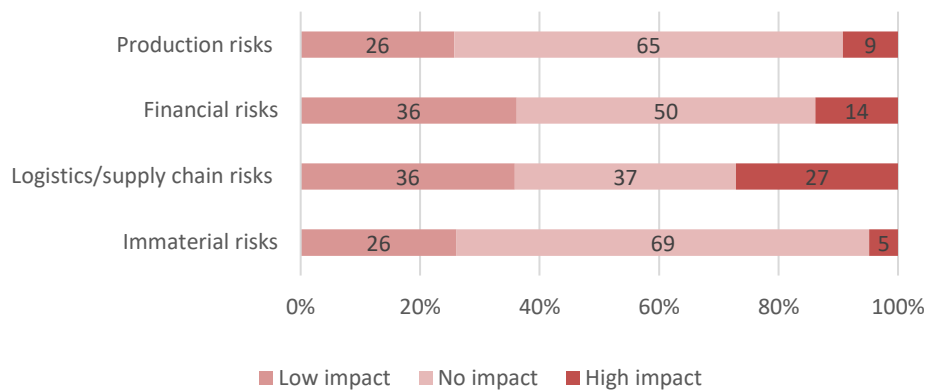
Only in the case of the ability to maintain a high level of situational awareness the percentage of medium-sized companies showing low level of adaptability (9%) is slightly lower than those companies reporting high level of ability (11%). Furthermore, small firms reported a low level of ability only in the case of maintaining a high level of situational awareness during the COVID-19 pandemic (2%). Large firms show the greatest level of ability. This is particularly true when addressing changes and providing a rapid response to supply chain disruptions caused by COVID-19 (in both cases the percentage is 25%).

About the impact of risks related to the pandemic on the surveyed companies (see Figure 7), the following four categories of risks have been identified:

- a) intangible risks (including risks related to ownership of collaborative innovations and intellectual property rights, risks to protect knowledge and expertise, and brand and image risks);
- b) logistics/supply chain risks (including risks related to product availability, risks of late deliveries, supplier bankrupt risks);
- c) financial risks (including cost/price risks, and currency risks);
- d) production risks (quality of final product risks, including workforce risks, product safety risks, risks related to possible environmental damage caused by the manufacturing of the product).

The logistics/supply chain risks were considered the risks category that had the highest impact on company management with particular reference to delivery delays and product availability.

Fig. 7: Impact of risks related to the COVID-19 on the company



The impact of risks was also considered in relation to the company size (see Figure 8). The data shown in the figure are related to the responses “high impact” only given to the previous question. It emerges that logistics/supply chain risks are the only type of risk affecting companies of every size (16% for small firms, 6% for medium firms, and 9% for large firms respectively). Financial risks affected only small and large firms, while production risks affected large companies only. None of the companies stated that they were affected by intangible risks.

Fig. 8: Impact of risks related to the COVID-19 by company size

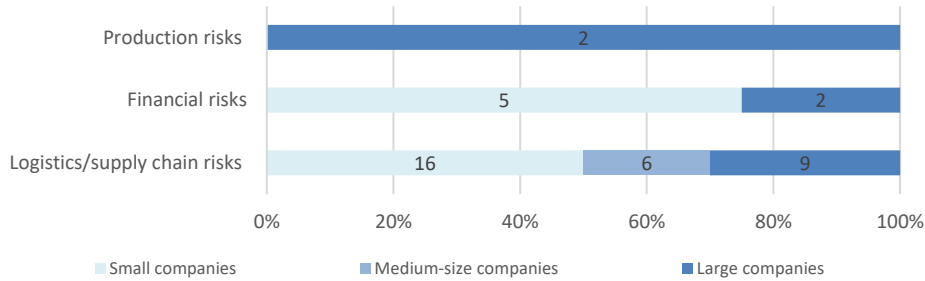
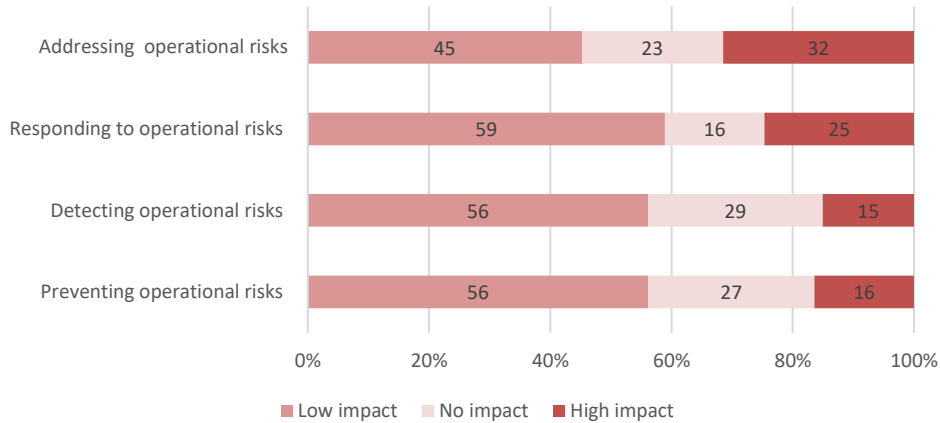


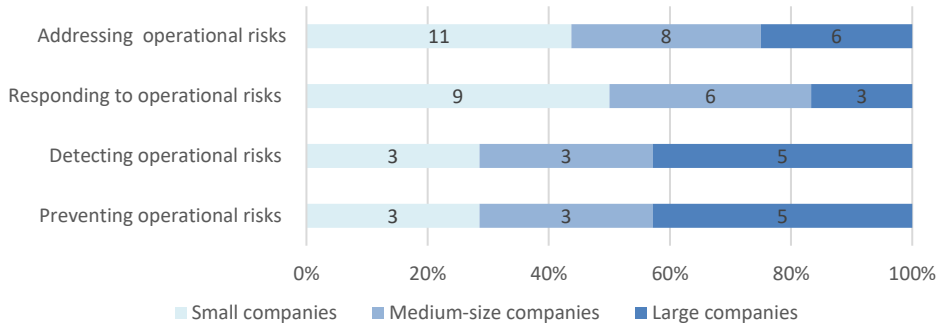
Figure 9 provides information about the impact of the COVID-19 on risk management. It is interesting to note that, generally, most of the respondents reported quite a low impact of COVID-19 on risk management. The impact of the pandemic on the ability to recover operational risks (e.g. use of task forces, contingency plans, clear allocation of responsibilities) and the ability to respond to operational risks (e.g. back-up suppliers, extra production capacity, alternative transport modes) was considered by the respondents high.

Fig. 9: Impact of the COVID-19 on risk management



When considering the answers to the above question with reference to those companies that have answered “high impact” only by company size (see Figure 10), it emerges that SMEs indicated a high impact in addressing (11%) and responding (9%) to operational risks, while large companies suffered more from the impact in detecting and preventing operational risks (both 5%).

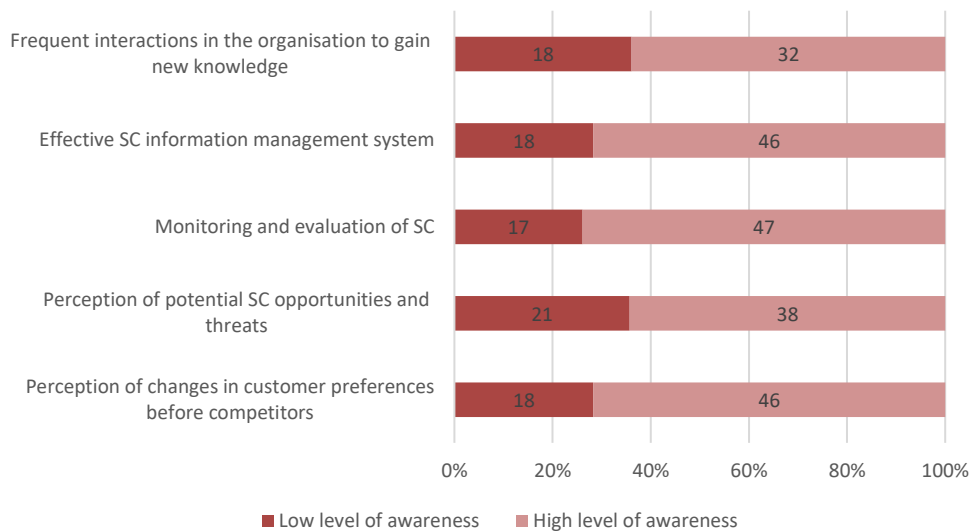
Fig. 10: Impact of the COVID-19 on risk management by company size



4.3 The influence of COVID-19 on future development of supply chain activities

Another issue investigated in the survey was the influence of COVID-19 on future developments of supply chain activities. In this area, a first issue analysed was the level awareness of the surveyed companies about the evolution of the external environment during the pandemic. In Figure 11, the answers related to the high level of awareness were considered. From the industry segment point of view, biomedical technology and services/software companies present the lowest level of awareness.

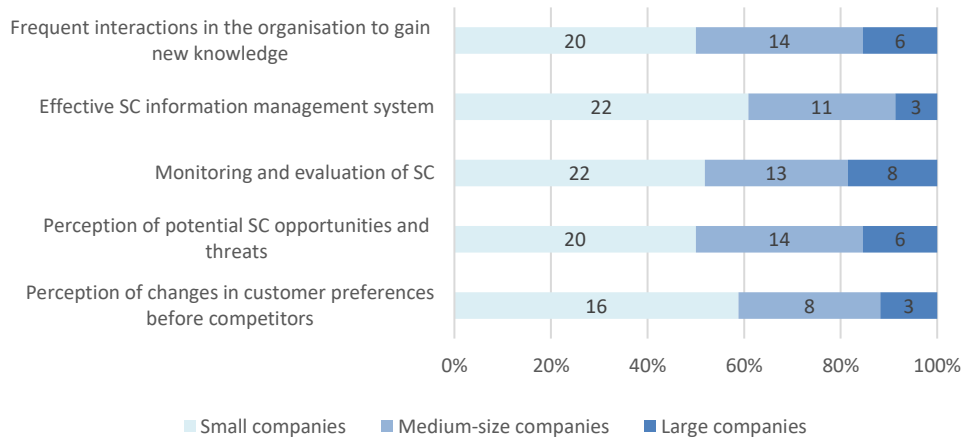
Fig. 11: Awareness on the evolution of the external environment during the pandemic



Analysing the above answers in relation to the company size (see Figure 12), small firms shown the higher level of awareness about the changes in

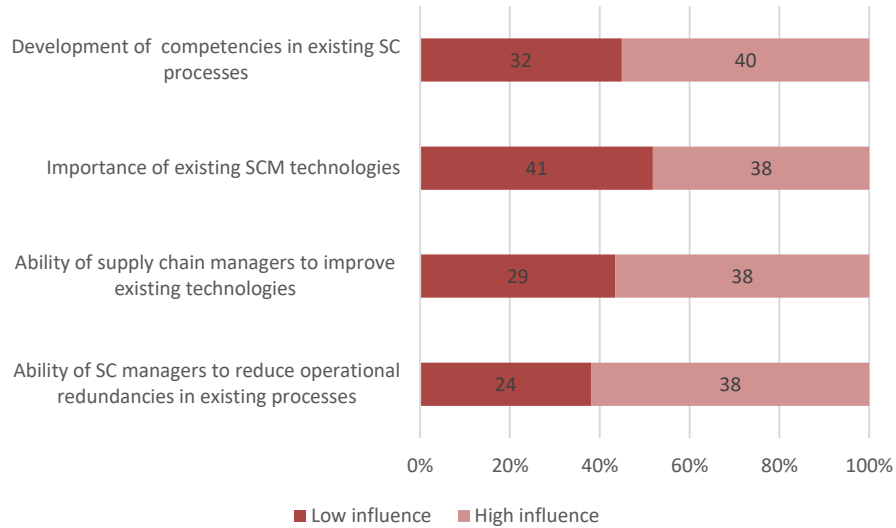
the external environment during the pandemic. On the other hand, medium-sized and large companies shown a lower level of awareness (almost the half of the percentage of small companies).

Fig. 12: Awareness on the evolution of the external environment during the pandemic by company size



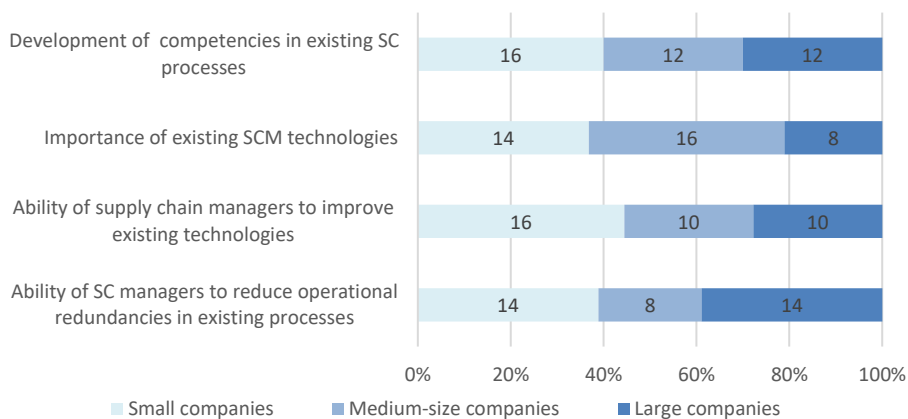
In relation to the supply chain activities that will be mostly influenced by COVID-19 in the future (see Figure 13), the respondents indicated that the development of competencies in existing processes, technologies and operational activities were slightly rated to have a high influence. The only area where the majority of answers indicated a low influence is the importance of existing supply chain technologies.

Fig. 13: Supply chain activities that will be influenced by COVID-19



The same question has been analysed from the company size point of view (see Figure 14). Data show that SMEs were more aware of future development of supply chain activities with specific focus on existing SCM technologies and competencies in existing supply chain processes. Large firms indicated the reduction of operational redundancies in existing supply chain processes as the most important area in future development of supply chain.

Fig. 14: Supply chain activities that will be influenced by COVID-19 by company size



5 Conclusions and implications

This paper explored the impact of COVID-19 pandemic on the Italian medical device companies. The results of the survey indicated that the main business area suffering from the effects of the pandemic was logistics management with a specific reference to delivery reliability, responsiveness to customer and sales. The impact of pandemic on logistics management seems more relevant for small firms than other type of companies. These results highlighting the strategic role played by logistics in the pandemic and the failure of small firms operating in the medical device sector to consider logistics as a competitive weapon to mitigate the negative effects of the pandemic.

Nevertheless, when considering the impact of pandemic on supply chain resiliency the vast majority of the respondents stated that it was rather low regardless of the company size. This seems in line with the ability shown by the surveyed companies to adapt to supply chain disruptions caused by COVID-19. In fact, the number of respondent reporting a high level of adaptability is higher than those that reported a low adaptability level. About the impact of risks caused by the pandemic, the risks related to logistics and supply chain were the most influential category with particular reference to delivery delays risks and risks related to product availability. In fact, this category of risks affected all type of companies.

Beyond logistics risks, financial risks affected small and large firms, while production risks mainly affected large companies. The information collected on the impact of the COVID-19 on risk management put in evidence that most of the respondents reported quite a low impact of COVID-19 on risk management. Only in the case of recovering and responding to operational risks, it was indicated that pandemic had a substantial impact on that ability, especially for SMEs. On the other hand, large companies suffered more from detecting and preventing operational risks.

About the awareness concerning the evolution of the external environment during the pandemic, the results indicate that small firms shown the higher awareness about the evolution of the external environment during the pandemic in comparison with medium-size and large companies. Finally, looking at the impact of the pandemic on future supply chain developments, the results indicate that small firms were more aware about this impact leveraging existing SCM technologies and competencies in existing supply chain processes. On the other hand, large firms indicated that reduction of operational redundancies in existing supply chain processes as the most important area in future development of supply chain.

On the basis of the above results, it is possible to identify some interesting implications from the managerial and research point of views. From the managerial point of view, SMEs' investment to improve the efficiency of logistics and the delivery systems should become a priority to prevent the setbacks and disruptions seen in the COVID-19 outbreak. In fact, to manage and reduce the impact of future catastrophic event, medical device companies need to build up strong relationships with key suppliers and invest in supply chain planning systems that are able to provide visibility across the entire supply network. On the other hand, even if the surveyed companies declared that the overall impact of the pandemic on supply chain resiliency was not so strong, it is evident that ability to predict changes in the business environment is limited and risk management is generally underestimated. For this reasons, decisions related to the realignment of resources to better respond to customer demand needs to be carefully reconsidered by medical devices companies. The re-alignment of resources needs to involve decisions concerning different areas such as the improvements in logistics management (where it may be crucial to evaluate alternative outbound logistics arrangements) as well as the increase of efficiency of operations (where the adoption of digital technology may be not further delayed). One additional implication for small medical device companies concerns the relationships with logistics service providers. In this respect, it is critical to sign contract with those logistics service providers that have enough capacity to ensure continuous production activity. Another critical implication relates to inventory management as the pandemic resulted in an inventory shortage. In this case, communication and relationship with key customers is necessary to find alternative supply arrangements, avoiding conflicts with customers, and minimize losses.

From the research point of view, this study suffers of some limitations. The first limitation concerns the sample size. In future research it is necessary to investigate a larger sample firms in order to generalise results achieved in this survey. A second limitation relates to quantitative nature of this study. Further research should develop case study analyses that could provide further insight into "how" and "why" medical device companies reacted to COVID-19. Finally, carrying out studies of this kind in different countries and comparing results may allow to identify best practices that may improve the level of preparedness of Italian medical device companies to face future similar catastrophic events.

In conclusion, COVID-19 pandemic caused significant disruptions in the medical device supply chain with shortage of medical and personal PPEs that have complicated that the control over the spread of the virus. For this reasons, future strategies of medical device companies should be based on

new capability and skills to manage digital technologies in order to innovate/adapt their business model and react more quickly to the threats of further catastrophic events (Pencarelli et al., 2020).

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The impact of COVID-19 on SMEs' entrepreneurial elements

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Keywords – Entrepreneurial elements, COVID-19, SMEs

Paper type – Long Abstract

1 Objective

The aim of this study is to examine how specific entrepreneurial elements, namely innovation, risk-taking, risk management, and being practice in the marketplace have affected Italian SMEs during the pandemic period.

2 Literature review

The Coronavirus Disease 2019 (COVID-19) pandemic was unexpected and, similarly to other health crises, it has had both short-term and long-term economic impacts on the global economy (Apostolopoulos et al. 2021; Donthu and Gustafsson, 2020; Lin and Zhang, 2020; Pencarelli et al., 2020; Ratten, 2020a; Zaremba et al., 2020). However, compared to large firms, “crises such as the COVID-19 pandemic are likely to have an inordinate effect on SMEs” (Juergensen et al., 2020, p.500), especially because of their higher level of vulnerability and lack of resources. Consequently, the COVID-19 pandemic has strongly affected several activities and entrepreneurial elements of SMEs (Apostolopoulos et al. 2021). In this respect, according to Ratten (2020b), the most relevant elements of entrepreneurship able to face the COVID-19 crisis include innovation, risk-taking, along with risk management, and being practice in the marketplace.

Based on that, the present study focuses its attention on the above-mentioned entrepreneurial elements to understand how and if they affected Italian SMEs during the different phases of the pandemic emergency, namely the first phase/wave (from February 2020 to July 2020), the second phase/wave (from October 2020 to May 2021), and the third phase of management (which should be from mid-May through the end of the year and into 2022). Moreover, the paper attempts to identify the existence (or otherwise) of some possible permanent changes caused by COVID-19 to the entrepreneurial activities.

3 Methodology

To achieve these objectives, a qualitative study method has been selected since it allows to gain a more in-depth understanding of complex phenomena (Narooz and Child, 2017) and to give a response to how and why questions in process research (Leonard-Barton, 1990). Moreover, a multiple case study methodology enables a better definition of similarities and differences of the implementation practices (Eisenhardt and Graebner, 2007; Stake, 2013). For choosing information-rich illuminative cases, a purposeful sampling will be adopted (Patton, 2015).

In particular, the SMEs selection has been realized based on the following criteria: (i) fall into the SMEs categorization and therefore have less than 250 employees and an annual turnover of no more than 50 million euros; (ii) belong to the same sector; (iii) operate internationally.

Based on these criteria, two Italian SMEs have been selected (i.e., Firm A and Firm B), respectively based in Udine and Imola (BO), both belonging to the metallurgical sector, and operating at an international level mainly through export activities.

In-depth interviews have been carried out in Italian and digitally recorded. Finally, for data triangulation, the collected data will be compared with other sources: the firms' websites, annual reports, and other documents (Yin, 2018).

4. Findings

Findings allowed to detect how both firms have been similarly influenced by the COVID-19 pandemic. Notably, both respondents pointed out that initially, there was a blockage of the entrepreneurial activity with a consequent stop of international trade, followed by a gradual reopening of activities.

Regarding the innovative dimension, results confirmed that both firms present this feature since they have shown the ability to adapt relatively easily to changes in the market.

About the risk-taking and risk management approach, firstly, both firms have not abandoned any foreign market despite the uncertainties characterizing the current period of crisis. In addition, Firm A has taken on an even greater risk by deciding to enter the Canadian market during the crisis. Secondly, in order to manage to secure their businesses from the pandemic, Firm A limited the risk by producing only for the customers belonging to the ATECO categories allowed to operate by the ministerial decree while Firm B has aligned itself with the needs of the market with the final aim of continuing to work in a profitable way. Moreover, both firms confirmed that the pandemic has not caused a shift in their risk management activities.

Finally, concerning the last entrepreneurial element, being practice in the marketplace, both entrepreneurs have confirmed that the experience and know-how gained in the markets have represented a key strategic lever in dealing with the crisis. Additionally, this element has also helped them to continue their business and remain present in their already served markets, thus guaranteeing their survival in a highly turbulent context.

5. Conclusions

The study has attempted to investigate the consequences of the COVID-19 pandemic on the SMEs' internationalization processes by enriching the extant literature (Fath et al., 2021). In particular, results underline how both firms have shown a considerable adaptation capacity since they responded positively and proactively to the crisis situation. In particular, after an initial forced block, both firms have resumed their entrepreneurial activity, thus demonstrating their flexibility and resilience to the unexpected market changes. Notably, these capacities were positively and significantly influenced by the entrepreneurial elements investigated by the present study. From this perspective, results allowed detecting significant managerial implications, for SMEs, related to the identification of the correct modalities of exploiting innovation, risk-taking, risk management, and being practice in the marketplace within the pandemic context.

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The antifragility-opportunity nexus. Empirical evidences at the time of COVID-19

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Keywords – Entrepreneurial opportunities, antifragility, exogenous shocks, COVID-19

Paper type – Long Abstract

The COVID-19 pandemic emergency has had a heavy impact on the activity of firms in many industries, slowing down or paralyzing it for long periods. Even when these problems have not arisen, the necessary compliance with stringent health requirements made their activities more complicated and involved the incurring of costs for the adaptation of procedures. Most firms found themselves unprepared to face the pandemic and failed, even where it would have been possible, to mitigate its negative consequences or redefine their business proposals. Therefore, the impact of the pandemic on the Italian entrepreneurial fabric will be devastating. According to the estimates made by the Bank of Italy, due to the pandemic crisis,

bankruptcies in Italy in 2021 and 2022 are expected to increase by about 6,500 units, compared to 2020. In the midst of such a situation, alongside firms that have passively suffered the consequences of the pandemic, others have proved to be resilient, adapting to the new scenario, while still others have reacted by exploiting the opportunities generated by the pandemic. Based on these premises, the aim of this paper is to explore the nexus between antifragility and the discovery of entrepreneurial opportunities originating from major exogenous shocks, such as the COVID-19 pandemic.

This paper draws on the theory of entrepreneurial opportunity discovery and on the emerging literature on antifragility. In the Kirznerian view, entrepreneurial opportunities arise through exogenous shocks and constitute objective phenomena “waiting to be discovered” (Alvarez & Barney, 2007, p. 11). Entrepreneurs, thanks to their individual qualities, and in particular to the ability of alertness, are able to perceive and exploit them. The discovery of opportunities arising from exogenous shocks does not simply act as an antidote to the negative consequences that the following economic crisis can have on the firm; rather, it allows to thrive in these situations. Therefore, it cannot be associated with resilience, which allows firms to resist a crisis, but not to evolve. Instead, it appears to be associated with antifragility. In fact, as Taleb (2012, p. 1) argues, “the resilient resists shocks and stays the same; the antifragile gets better”. This means that, unlike resilience, inherent in the property of antifragility there is positive evolution. Research on the social impact of mass emergencies and other exogenous shocks have raised a number of important questions as to how different types of organizations cope with unfavorable events. We intend to contribute to this line of inquiry by analyzing in particular the role of non-physical resources (relationships with the related endowment of values and emotions), considered as a key dimension of the entrepreneurial context following an exogenous shock. In crisis situations, the networks of social capital that connect actors, both within and outside the firm, are essential in shaping entrepreneurial behaviors (Aldrich and Meyer, 2014; Yamamura, 2016; Williams and Shepherd, 2018). Relationships can foster cohesion, ease coordination and promote moral and psychological interpersonal support, accruing the socioemotional wealth endowment amidst adversity and helping antifragile firms make extraordinary efforts that give them the ability to capture opportunities under challenging conditions.

To deepen the understanding of these themes, given the exploratory nature of this study, we opted for a qualitative approach. In particular, we employed narrative analysis, considering entrepreneurs at the helm of firms operating in different industries, who discovered entrepreneurial opportunities during

the COVID-19 pandemic. We conducted semi-structured interviews, asking entrepreneurs to tell in detail the path which led them to identify and exploit opportunities generated by this major exogenous shock, as a response to the potential difficulties resulting from the shock itself. Narratives were transcribed and then qualitatively analyzed, identifying categories instrumental to describe and interpret the discovery paths.

The firms we considered in our study can be qualified as antifragile, since they were able to thrive in a situation of generalized crisis due to a major exogenous shock, such as the COVID-19 pandemic. Results revealed that it took shape through the identification and exploitation of entrepreneurial opportunities, created precisely because of this shock. Thus, in this situation, opportunity discovery constituted the means through which antifragility emerged. As expected, some personality factors typically associated with the figure of the entrepreneur, such as some of those included in the Big Five model (Costa & McCrae, 1985), together with risk propensity and tolerance for ambiguity (Brockhaus, 1982) seemed decisive in bringing out the antifragility of the firm, constituting prerequisites for reacting proactively to the shock. Alongside these individual characteristics of the entrepreneur, in order for the exploitation of entrepreneurial opportunities to materialize, even more so in such situations, we found the importance of social (and “emotional”) capital, at various levels within the organization. The creation of an internal environment devoted to creativity and experimentation is a further fundamental prerequisite to be antifragile.

The value of this paper lies in the identification and the exploration of the nexus between antifragility and entrepreneurial opportunities. It presents some implications both on the practical and on the theoretical side. From the theoretical point of view, combining the discovery of opportunities with the concept of antifragility allowed us indicate a path to enrich the study of entrepreneurial opportunities arising from exogenous shocks, which can allow companies to avoid suffering negative consequences of a generalized crisis. In the future, scholars may focus on deepening the antifragility-opportunity nexus and examine it in different contexts. As regards practical implications, first of all, it can help entrepreneurs to become aware of the possibility not only of resisting, but also of prospering following a shock which, like the pandemic one, has devastating effects on the entrepreneurial fabric at a global level. It can also lead them to remove the veil that hides the factors that could favor antifragility or those that could hinder it within their firms, identifying what to do to develop this property.

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COVID and Business Crisis

“It-could-work!’ Multistakeholder governance mechanisms for firms’ regeneration: An opportunity for SMEs in times of crisis.

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Abstract

This study addresses workers buyouts as a form of governance suitable for designing and implementing solutions to business crises from a socially responsible and multistakeholder perspective. In recent years, there have been repeated phases of economic crisis that have led to increased business crises, resulting in great damage to society as a whole as well as the real lives of the people involved. Business crises affect managers and employees working at firms in crisis, which in turn impacts their families.

Using a single case study approach, this research focuses on the governance changes leading to a workers buyout and the formation of a cooperative firm. It explores in depth the conditions that enable the start-up of a workers buyout and the critical issues faced by the new form of governance. In particular, the study focuses on how external stakeholders can play a crucial role in a firm’s entrepreneurial relaunch. The findings show that the experience of a workers buyout can represent a meaningful model for relaunching on a new entrepreneurial path that offers new opportunities to a firm, its managers and its workers from a multistakeholder and sustainable perspective.

Keywords – Workers Buyout, Multistakeholder Governance, Business Crises, Cooperative firms,

Paper type – Academic Research Paper

1 Introduction

The last few decades have been struck first by the global financial crisis and, more recently, the ongoing COVID-19 pandemic, which have given rise to extraordinary waves of business crises worldwide that have had a major impact on social and economic systems. A remarkable consequence of these crises for firms is the loss of jobs, skills and professional experience and the ensuing social impact of these losses. The effects of business crises have highlighted the need for communities to find effective solutions capable of combining business performance with solidarity. The need has emerged to address social and economic concerns in a shared way, as neither individuals nor organisations have been able to cope with the critical issue of a global crisis in which even ordinary instruments and practices of solidarity and support have proven inadequate or insufficient.

When a firm faces critical challenges to its survival, changes in its current governance can be a key means of responding to the need for strategic change. The most widespread forms of governance have demonstrated their limitations, favouring a search for new solutions to overcome business crises in a way that is convenient not only from an economic point of view but also in its effects on the lives of individuals and the communities to which they belong.

Changes in an enterprise's form of governance should be geared towards enabling the enterprise to obtain the relevant resources and skills to overcome the problems it needs to handle. Among these relevant resources, internal cohesion among the organisation's members and the sharing of objectives and efforts necessary in attempts to revitalise the enterprise may also play a relevant role. In addition, cohesion with external stakeholders – especially the community and social environment to which they belong – can facilitate access to financial resources and new business opportunities, maintain relations with the supply chain and obtain the commitment of institutions to finding a solution that is in the common interest.

This research enters the field of how changes in a company's form of governance can contribute to overcoming a business crisis. In particular, using a single case study design, it addresses how and why the shift to a workers' buyout (WBO) can represent adherence to a multistakeholder approach to democratic governance that fosters the overcoming of crisis and community resilience.

A WBO is a form of governance that is useful in responding to social and economic failures and serves as an effective foundation for revitalising and developing a local community. By setting up a WBO, workers can come together to address a common need through a democratically controlled

business. In this way, they can preserve and nurture the human capital of the communities in which the business is run. WBOs can therefore be seen as a form of governance that contributes to the resilience of a community's economic and entrepreneurial systems.

When faced with a failing business, the logic of a WBO is to view workers not simply as creditors but also as potential investors. The WBO as a form of governance is characterised by the ownership role held by workers, who run the business directly as well as indirectly (through the appointment of their representatives as board members or senior management). It is an entrepreneurial venture often undertaken to save a firm in crisis. It may be part of a business restructuring, conversion or rescue intended to preserve a business and jobs and limit the impact on the community. WBOs are commonly implemented through the establishment of a new legal entity (often a cooperative enterprise) in accordance with national regulations, which vary from country to country. In this way, a WBO can acquire the most suitable assets and resources to embark on a new entrepreneurial path without being overburdened by the legacy of the failing firm.

WBOs, which are often established as cooperative firms, have proven in many places around the world to be an effective form of governance for dealing with business crises in a shared and conscientious manner, especially when they have a relevant impact on the individuals and communities involved. WBOs are organisations with distinctive characteristics that can effectively address a variety of social and economic needs. They are rooted in a foundation of shared and distinctive values and principles that guide more democratic and sustainable entrepreneurial behaviour and decision-making compared with other organisation types.

2 Theoretical Framework

Despite the serious and often long-lasting consequences of global economic crises on society and business systems, debates among scholars, policymakers and economic actors have paid limited attention to the potential viability of forms of governance other than the traditional investor-owned model. Cooperative WBOs can play a significant role in promoting greater sustainability and social inclusion within economic systems as well as introducing forms of governance that are alternative and complementary to the prevailing investor-driven approach.

Sommer (1991) argues that the main contribution of cooperative firms lies in their ability to act as models of a socially responsible business. WBOs are characterised by a high level of worker involvement and participation,

as workers contribute to the start-up through their work as well as their capital. This capital contribution is extremely significant, as workers often commit a substantial part of their personal savings in an attempt to save their jobs and obtain future remuneration. Therefore, confronted with a firm facing bankruptcy, they exchange the certainty of their savings for the uncertainty of future remuneration. Workers' stakes and involvement take the two main forms of shared equity, which includes both individual accounts and dividends, and participation in the organisation's governance and top hierarchical positions, which enables participation in decision-making about firm management and strategy. The involvement and support of external economic and institutional stakeholders can be decisive in two key moments of the WBO. First, when faced with the risk of imminent bankruptcy, at least some workers attempt to involve other workers to gather their resources and skills to attempt a relaunch. The establishment of a WBO is often the extreme response to a crisis for which all other solutions have proven infeasible. The support of institutional stakeholders or other firms can be instrumental in finding solutions and gathering the resources necessary to avoid bankruptcy and (at least partially) save the business by setting up a WBO. Second, the WBO must address the needs for reorganisation and innovation of the business model in order to set forth on a new path that will ensure continuity and development over time. Even at that stage, external stakeholders can contribute know-how, resources for investment and a network of useful relationships to stabilise the WBO as an ongoing concern.

WBOs are characterised by specific balances and challenges that affect how they play their roles in overcoming a business crisis. As a distinctive form of shared governance, WBOs leverage solidarity and the combination of common values and needs in the pursuit of economic efficiency. Participatory governance offers employees the opportunity to question and influence the relationship between strategic and operational plans and broader issues concerning the common good (Bernacchio & Couch, 2015).

WBOs implement both inter- and intra-organisational processes that foster the organisational capacity for resilience (Bassi & Fabbri, 2019). A distinctive feature of WBOs is their higher level of democracy in decision-making processes compared with traditional enterprises. Decisions resulting from participatory models, inspired by the principles of democracy, challenge the economic efficiency of hierarchical models of organisational governance and can therefore reduce their negative effects on the organisation. Recently, there has been a wave of renewed interest in the demand for democracy in governance and organisations. However, unlike previous studies, which addressed this topic as a moral-political issue, more

recent literature has highlighted its usefulness for the running of a business (Johnson, 2006). From this perspective, among other criticisms of the traditional hierarchical model, it has been argued that organisations now (compared with in the past) show a growing need for employees with a greater propensity to collaborate, take responsibility and make decisions. Recent studies have highlighted the existence of non-hierarchical or less hierarchical organisational structures that can respond more effectively to the need for speed in decision-making and strategy implementation and develop innovation by exploiting (even temporarily) knowledge residing in different people or places (Lee & Edmondson, 2017).

In this view, increased workplace democracy can inject into organisations a sense of self-regulation, justice and freedom that facilitates the maturation of responsibility in employees, with additional beneficial effects on democratic culture in civic life (Block, 1993; Bowles & Gintis, 1996). Democracy can therefore contribute to an organisation's ability to align with the demands of the competitive system. The traditional organisational model has become progressively less suited to meet current and prospective competitive challenges, as it is geared towards reinforcing hierarchy, autocracy, injustice, inequalities and privileges without making a substantial contribution to the development of economic value (Cloke & Goldsmith, 2002).

Democratic and participatory governance is not immune to weaknesses. The prevailing literature in organisational theory and management practice regards democratic governance and economic efficiency as antagonistic (Johnson, 2006). A balance between the adoption of democratic practices of self-determination and the preservation of efficient organisational functioning must therefore be pursued. Therefore, according to Rotschild-Witt (1979), organisations committed to practicing democratic forms of governance should be assessed in terms of the effort they make to implement completely different values, not how they apply values and rules that they do not share.

The critical nature of the balance that allows for the coexistence of democratic governance and efficient organisational management is emphasised when facing a business crisis. In WBOs, the common goal of survival and continuity over time, for the business as well as the organisation, can strengthen employees' motivation and configure social control practices that ensure the efficient operation of organisational processes. For instance, whether worker cooperatives manage to improve their competitiveness through greater workforce flexibility compared with other enterprises is currently up for debate (Erickson et al., 2003). In

addition, shared governance can make it easier to leverage skills that can generate innovation, thereby enabling survival over time.

A crucial challenge that WBOs face in entrepreneurial relaunches is the formulation and subsequent implementation of new strategies or business models that will sustain the new business venture over time. This challenge may be critical, as the WBO starts from a condition of business crisis, in which the business has often deteriorated and therefore faces greater challenges in returning to profitability. Moreover, in such conditions of difficulty and uncertainty, democratic governance can extend involvement in key decision-making processes to employees who may not have the requisite professional skills. It is therefore necessary to establish governance practices that regulate participation in decision-making in the general interest of the firm and all employees (Forcadell, 2005). However, shared and participatory governance also enable the gathering and exploitation of individual competencies, thus fostering the strategic renewal process. Overcoming the limitations that led to the original crisis by renewing the business model is essential for the WBO to stabilise and achieve the levels of economic efficiency and competitiveness necessary to run the business over time.

In WBOs, as a form of shared governance, the variety and hierarchy of objectives are established using a multistakeholder logic that integrates and balances financial objectives with sustainability and social inclusion. The different balancing of objectives affects workers' behaviours, particularly when dealing with the contingencies of a business crisis. Pencavel et al. (2006) found significantly different behaviour in worker cooperatives versus traditional enterprises operating under capitalist governance with regard to capital, wage and employment decisions. Specifically, they found that, while market shocks affect both types of enterprises, their impact is higher in worker cooperatives. Wages are more flexible in worker cooperatives than in capitalist enterprises, and when product market shocks occur, worker cooperatives tend to contain negative effects on employment levels.

In light of these findings, a WBO may be an appropriate form of governance when initiating entrepreneurial revitalisation operations in which the protection of employment levels is a pre-eminent objective for not only workers but also the local community. More generally, previous research has shown that firms' reactions and adaptations to changes in economic conditions are influenced by their organisational control structures. Burdin and Dean (2009) found different behaviours in wage and employment levels in worker cooperatives compared with firms established under traditional capitalist governance. They also highlighted that, in

workers' cooperatives, the main objective is not to provide workers with above-average wages but rather to stabilise employment levels, especially in times of crisis. Lampel et al. (2014) found superior performance in the resilience of worker-owned firms relative to other forms of governance during periods of financial crisis. This superior resilience was seen not only in terms of firms' survival rates but also in terms of their ability to maintain operations and preserve social and intellectual capital.

3 Methods

This paper aims to extend the extant literature on governance mechanisms and strategic change by analysing how alternative models and mechanisms of governance might enable greater resilience among enterprises – in particular, small and medium-sized enterprises (SMEs). The case study method was chosen as the most appropriate research approach for this study for two main reasons. First, little research has addressed the investigated topic to date. Second, in a partially unexplored field, case studies allow researchers to investigate a phenomenon in depth within its real-world context (McNulty et al., 2013; Siggelkow, 2007). According to Yin (2009), case studies are appropriate for investigating a phenomenon within its real-world context when the investigator has little control over the events. Because this paper aimed to investigate how and why WBOs, as a form of multistakeholder governance, enable a business crisis to be overcome and can sustain a new path of entrepreneurial revival in SMEs, the research question was considered to satisfy this criterion.

Moreover, the research site matched the requirements for the purpose of theoretical generalisation (Tsang, 2014) and was capable of ensuring high levels of access to information from a plurality of primary and secondary sources (Yin, 2014). The research site was a manufacturing SME operating in the tile industry. The research was carried out using a single case study approach (Yin, 2014). A single case study is suitable when a phenomenon requires studying a unique, critical or revealing case. In adopting a single case design, our intention was to provide insights into a very powerful example of the investigated phenomenon (Siggelkow, 2007): a regenerated firm, born of multistakeholder governance mechanisms, with which it was possible to successfully reconfigure and reshape a business model characterised by objective elements of criticality and weakness but with a strong and healthy core supported by the set of distinctive competences and skills.

The information used in this study comprised both secondary and primary sources. The secondary sources included national and international

studies, both within and outside the accounting and management literature, as well as relevant newspaper reports. These secondary sources supported the development of the theoretical framework. The primary sources included company reports and data as well as information collected through semi-structured interviews. Individual semi-structured interviews were conducted with all organisational actors holding positions in governance or management. Each interview was digitally recorded and subsequently transcribed. The interviews varied in length from 40 minutes to 1.5 hours. Several successive interview sessions were planned in order to delve more deeply into interesting aspects that emerged in the initial interviews. Each transcribed interview was discussed by the authors to highlight critical aspects on which to focus attention. Further interviews with other key informants, such as the professionals who managed and led the operation and Legacoop Reggio Emilia, were conducted to produce a more accurate analysis and to represent different points of view (Yin, 2014).

Our data analysis was guided by theoretical concepts related to corporate governance and strategic change theories in an iterative cycle of analytic induction and deduction. The findings result from the collected data, but they are also the outcome of interactions with the extant literature.

4 Case Study

GL is an interesting case of ‘firm rebirth’ through the WBO mechanism (Wright et al., 2001). GL originated in the Sassuolo Ceramic District from a medium-sized enterprise without longer-term prospects: M. Spa. The GL case is well described by its current president, Dr Antonio C.: ‘GL is a unique model...Many people have come from abroad to visit us, to understand how workers can become entrepreneurs and take over a company’.

The uniqueness of the case presented concerns the articulated and delicate process that led to the establishment of the cooperative and the entrepreneurial skills demonstrated by the ‘new company’ in overcoming important issues in the first years of its existence. The GL case also represents a successful example of the application of a multistakeholder governance model based on a deep change and redesign of both the form and mechanisms of previously adopted governance.

GL originated from M. Srl, a company established in April 1983 by four former executives in the ceramics industry who wanted to start their own business producing and selling glazed tiles. The results were excellent throughout the 1990s thanks to a successful entry into the US market. However, this trend reversed in the early 2000s: the fluctuating performance

of the US market, as well as some risky financial decisions made in attempts to counteract the dynamics of the dollar–euro exchange rate, led to the company’s progressive deterioration. The 2008 subprime mortgage crisis in the US housing market further precipitated this situation. In just one year, M.’s turnover – 70% of which came from the US market – fell by 85%. Dr Antonio C. described the last years as ‘[d]evastating – the signs were there, but we could see them!’

At that juncture, there was a lack of entrepreneurial drive and managerial farsightedness that could perhaps have turned the company’s fortunes around. There was no strategy for repositioning the company on the market; rather, it was decided to ‘hope until the very end’ that things could ‘sort themselves out’. The owners simply changed their sales staff several times in the illusory hope of getting their products onto the market.

Furthermore, the company was in a difficult financial situation following large investments made since 2004. The crisis generated powerful tensions among the shareholders, who decided not to make any further investments in the company and then, in the early months of 2008, launched a divestment project. In May 2008, two distinct branches of the company were identified. A commercial branch – comprising the brand, customer portfolio, logistics and warehouse – was rented and subsequently sold. A second branch – production – was merged into the company OPT Spa, whose shareholders were two of the three former shareholders of M. Srl.

Optima’s situation was also desperate. In June 2008, OPT Spa was admitted by the Court of Reggio Emilia to a bankruptcy arrangement procedure. Other bankruptcy proceedings ensued until 21 February 2012, when the Court approved the declaration of bankruptcy.

In 2009, when the irreversible nature of the crisis became evident, the project to create GL began to take shape. GL, which started in 2011, immediately decided to completely revise the previous business model. As opposed to its operations in the past, GL would not produce under its own brand but would rather carry out work for third parties. Initially, GL’s business volume was limited to supply contracts signed with three partner companies. In the first months of 2012, GL had orders on its books for just seven days. The companies in the district, after overcoming an initial mistrust of GL (the only workers’ cooperative in the entire ceramics industrial district), supported the cooperative and helped it to get through these difficult times.

The difficulties GL experienced at the beginning of 2012 coincided with a tragic event that shook the whole of Emilia Romagna, especially the provinces of Modena and Reggio Emilia: the earthquake of May 2012. This earthquake seriously compromised important companies in the ceramics

sector, including CM, one of GL's three partner companies. As a result of the severe damage it suffered, it had to suspend production, leaving an outstanding trade debt to GL of approximately one million euros. This additional difficulty, which seriously undermined not only GL's financial stability but also the morale of its cooperative members, was addressed and overcome thanks to the support of Legacoop. Legacoop facilitated the intervention of the factoring company Cooperfactor S.p.A., which advanced invoices for up to 18 months against the four to five months offered by banks.

When GL's situation looked seriously compromised, an unexpected event rekindled hope. S.A., one of the most important and renowned companies in the district, had suffered extensive plant damage and needed third-party companies to carry out production. GL's president, Dr Antonio C., recalling his first conversation with the president of S.A., said: 'During the conversation, he emphasised how the two companies had something in common. We are both "earthquake victims", he said, but it may well be that by putting us together we can do something good'. The collaborative project took off shortly afterwards in the spirit of 'honest exchange'. The earthquake had not affected S.A.'s atomisation plant for the production of raw materials, which GL did not have. The two companies therefore entered into an agreement whereby GL would source raw material from S.A. and then produce and return tiles. S.A. moved state-of-the-art digital printing machinery to GL's premises and made available some of its technicians, who worked side by side with GL's technicians for a year and a half, transferring much of their know-how to them. 'This proved to be a real springboard for GL; it was the best marketing operation we could have done', said Dr Antonio C.

The news that GL was buying raw materials from S.A. and producing part of the latter's output spread rapidly in the district and greatly increased the confidence of other companies, which until then had viewed the cooperative project with a certain diffidence, particularly in light of the series of unfortunate events and difficulties GL was facing. Today, GL is a solid reality, with excellent results and good prospects.

5 Findings

5.1 New governance mechanisms to overcome the crisis

In 2009, given the progressive and irreversible worsening of the company's crisis, one important accountancy studio in Reggio Emilia presented a possible solution to a small group of employees to save the company and preserve their jobs. Dr L., the accountant, proposed adopting

a model that was already being tested in the same period at Art Lining, another company operating in a different industry but the same area that was also in an irreversible crisis. The project involved setting up a new company: a cooperative owned by the employees of the company in crisis. These employees would become entrepreneurs, offering the company and themselves a chance for rebirth and renewal. Dr L., recalling the genesis and logic of the initiative, said:

In 2008, the year the crisis started, my heart ached to see companies closing. This meant a depletion of technological assets despite strong company cultures and still-good market shares. Together with the plants, there was a risk that precious know-how would be scrapped!

The project was carefully considered. It was risky and had a rather uncertain future, especially considering that the cooperative model was, at that time, completely unknown in the ceramics industry. At the same time, the economic context was complicated, and job prospects were poor. The entire ceramics district was in a state of deep crisis, and it would have been difficult to relocate the company's 60 employees. For these reasons, the employees courageously embarked on the new project, and in March 2010, the cooperative GL was formally established. The start was anything but simple, as the current president recalled: 'We started from scratch, without an order, without a customer. We needed five million euros to get this factory going again! Without the help of Legacoop, we would not be here today'.

In total, 30 of the bankrupt company's 60 employees decided to take part in the new industrial project, transforming their status from employee to worker-partner. In order to find the money necessary to contribute the equity of the cooperative, they made use of Law 223/1991, which allowed them to ask INPS for an advance payment of the entire mobility allowance if it was intended to set up a cooperative. The risk they assumed was high, and it required a solid project. As established under Law 223/91, if the WBO project did not succeed within 24 months of the establishment of the cooperative, the worker-members would no longer be entitled to any form of mobility.

GL's shareholders' equity initially amounted to €1,618,000 (divided into 64,720 shares with a nominal value of €25 each), of which €418,000 was contributed by the 31 worker-members, €300,000 by Coopfond, €300,000 by CFI and the remaining €600,000 by three commercial companies operating in the same industrial district: PG S.p.A. (€300,000), CM S.p.A. (€200,000) and XIS S.r.l. (€100,000).

Initially, GL had great difficulty finding external work. Furthermore, suddenly and unexpectedly, one of the three contracting partner companies

entered its own crisis. In the first six months of operation, GL had invoiced this company in the total amount of four million euros. Two invoices became uncollectable, with potentially dramatic consequences. At the beginning of 2012, GL had an exposure of approximately €1.5 million to banks. Recalling that period, the president Dr Antonio C., said: ‘In February 2012, we were practically bankrupt, with the risk for the worker-partners of losing everything, including their mobility’.

In order to save the company, a recapitalisation by the worker-members and institutional financiers was necessary. Coopfond invested a further €200,000 under the condition that each of the 32 worker-members subscribe to a further share of capital (4,420 shares) for a total of €110,500. The subscription was made by deducting €50 per month from their salaries for the next five years. CCFS, Banca Etica and Unipol also supported GL.

5.2 Role of external stakeholders

In addition to the leading role played by the accountancy studio, GL was supported by another external stakeholder: Legacoop. The coordinating, supervising and guiding role played by Legacoop was decisive. Legacoop set three preconditions to guarantee its support for the start-up of the entrepreneurial project:

- a) a strong and decisive discontinuity with the past in governance and management of the business;
- b) a new wage policy; and
- c) an increase in productivity.

The discontinuity with the past was necessary because of the serious mistakes made by the previous management and in order to avoid dangerous influences. The basic idea was to give the company a second life based on completely different forms and mechanisms of governance and management. This meant first excluding the three previous owners, who had initially expressed an interest in the project. Two accepted the decision without issue, but a long battle began with the third, who had played an administrative role in the previous management.

5.3 Toward a multistakeholder leadership perspective

The board of directors was appointed according to the principles of democratic governance and efficient management. It was decided that seven of the 10 members should be worker-members, one an external professional with strong technical skills, one a representative of Legacoop (to supervise and act as a guarantor) and one a representative of the industrial partner MC.

In the first stage, board members were chosen by the assembly of worker-members by eliciting seven preferences (equal to the number of

board seats available for worker-members) from each member. The initial mechanism for defining the share of member representation changed over time. These changes were necessary to refine the participatory governance mechanisms in order to avoid harmful tensions between members. Currently, the process begins with the preparation of a list of members who intend to stand for election to the board. An electoral commission is then appointed, consisting of one non-candidate member and two external guarantors. Its task is to consult all members, both jointly and individually, to elicit their opinions on each candidate. At the end of the consultations, the committee is called upon to draw up a list consisting of the seven names with the greatest consensus based on the opinions expressed after the interviews. This list is then submitted to the shareholders' meeting for approval by open vote. In GL, members are called, even if only informally, after each board meeting for information on what has been discussed and decided. These meetings have become, as the president Dr C. observed, 'an opportunity to make members literate on the subject of financial statements'. It is one of the president's tasks to keep the social base informed, which is 'not always an easy task, considering that in the company we work in shifts'.

To support the new project, Legacoop set the condition of implementing a new, more flexible wage policy (Pencavel, 2006). This involved abolishing the productivity bonus that had previously been guaranteed. The bonus consisted of a variable salary component of approximately 20%. This implied that, for the first three years, the founding members would receive a salary of 80% of what they had earned under the previous management. The variable component was then returned in two stages: 10% in the fourth year and 10% in the fifth year. For three years, this component was conditional upon achieving a positive economic result, but was then converted into a fixed component. Legacoop also demanded that, even with wages differentiated according to skills, roles and responsibilities, a maximum ratio of 1:3 between the minimum and maximum wage (including benefits) should be guaranteed. The increase in productivity – Legacoop's third condition – was achieved by increasing working time from 36 to 40 hours per week for all workers.

Starting the project took 15 months. The first obstacle was the resistance of the trade union and employees. Frictions arose that required months of negotiation and, in several cases, the signing of customised agreements. Mrs Daniela C., the head of the Economic and Financial Office of Legacoop Emilia Ovest (the main external stakeholder), was actively involved in the project from the beginning and admitted that 'several times

we were tempted to give up everything. To build the project and reach an agreement with the trade union, it took almost a year!’

6 Discussion and conclusions

Business crises are a highly impactful phenomenon for the community as a whole. In addition to the obvious economic consequences, which primarily affect owners, workers and any partners with significant economic relationships, they can cause a significant impoverishment of the social and economic context in which they occur. In spite of these considerable implications, previous studies have paid only modest attention to how changes in governance can enable solutions that not only protect the people and businesses involved but also support community resilience. The shift to forms of governance that are consistent with multistakeholder approaches, such as WBOs, can foster new paths of entrepreneurial revitalisation based on the greater empowerment of organisational members, managers and workers as well as the targeted involvement of external stakeholders, such as banks, customers, suppliers and institutional actors. This paper lifts the veil on how WBOs can help overcome business crises when other investor-centric governance solutions fail. In doing so, this research improves the theoretical understanding of how changes in governance can foster community resilience in addition to protecting business activity and the wealth of experience, relationships and skills built up over time. Thus, this paper makes several contributions.

First, this paper opens the black box of multistakeholder governance, highlighting how and why different governance mechanisms can be redesigned and implemented in a WBO to overcome a business crisis. This specific combination of roles and incentives downgrades the primacy of the financial perspective in assessing investment in the WBO and emphasises shared values, generally inspired by the cooperative movement. It also highlights the value of cohesion among the organisation’s members in facing and overcoming the challenge of a business crisis. Adherence to cooperative values and principles (e.g. open admission, democratic and participatory governance, job protection, social inclusion) allows access to institutional actors who can facilitate the acquisition of the resources needed to start the new entrepreneurial venture. In addition, emphasising the social value of the cooperative enterprise (e.g. many worker cooperatives devote a certain percentage of their profits to community and local social initiatives) can facilitate institutional support for accessing guarantees to obtaining credit, facilities or other resources. Organisational practices that seek to combine democratic logic with business management are oriented toward

shared governance models that encourage participation and involvement. The introduction of democracy into organisational processes is often a key element when carrying out organisational change, but previous literature has identified critical issues in its implementation (Argyris, 1998).

A second contribution concerns how leadership is exercised from a multistakeholder perspective. WBOs combine potentially incompatible needs in the coordination and use of authority mechanisms. On the one hand, it is necessary to ensure adherence to coordination models suitable for supporting the correct management of the business. On the other, adherence to democratic models and the centrality of cohesion, sharing of values and commonality of purpose tend to reduce the appeal to formal mechanisms in leadership and governance. Although previous literature has traditionally focused on individual, charismatic conceptions of leadership, recent studies have highlighted forms of collaborative leadership that are rooted in democratic management principles (Cheney et al., 2014). Leadership consists of a collective social process that emerges from the interactions of a plurality of actors. Therefore, if the organisational change necessary to overcome the business crisis is understood as a process of workers' democratic participation, the endorsement of leadership depends on its consistency with the values that distinguish the organisation.

From this perspective, combining deliberations in formal venues with forms of communication inspired by participatory dialogue can foster conscientious and effective leadership in WBOs. Participatory dialogue represents a mode of communication that develops trust and mutual understanding and thus promotes the pursuit of reasoned, informed and shared decision-making on issues of common concern to the firm, workers and broader system of interests converging on the WBO (Raelin, 2012). Collaborative leadership is grounded in workers' active participation in the processes of the governance and management of the business. It can be formalised in internal regulations as well as through external statutes, regulations and policies, but it becomes effective when practiced with democratic and transparent forms of organising.

Leadership characteristics in WBOs should be consistent with ways of organising and with information transparency to promote a culture of ownership among workers. Cheney et al. (2014) associate ownership culture with requirements regarding the degree of control workers can actually exercise, the range of issues they can influence and the levels of the organization they can affect. The combination of social and conscience motivations with the effective possibility of conditioning key decision-making processes allows WBOs to represent a form of shared governance

that attempts to overcome business crises by embarking on a new entrepreneurial path.

A third contribution of this research involves the role of external stakeholders in the governance form of WBOs. A WBO's establishment and continuity over time may be facilitated by relationships with external stakeholders and rootedness in its host community. External stakeholders can provide access to resources, expertise, funding and other forms of support that are often of key value. A WBO garners support from its community and local institutions in order to help a business survive and be run by workers. Similarly, relationships with external stakeholders can provide valuable contributions in the later stages, when an entrepreneurial relaunch is designed and implemented to lead to good economic and financial performance within the planned time frame. Access to incentives, tax benefits or contributions from the state as well as local public and private institutions can help overcome the challenges that WBOs have to face at different times. External stakeholders contribute to making the WBO a form of shared governance in which a plurality of actors are committed to protecting a business, which is seen both as a value and a community concern.

The value that the host community recognises in the WBO as a means of generating social value through economic activity that primarily protects job security motivates the creation of structures and services that can facilitate its establishment and activity. Institutional entities, both public and private, can provide training activities to convert a business into a workers' cooperative. Similarly, service centres for the promotion of cooperative entrepreneurship can be established that can also act as incubators and accelerators and provide services in the search for partnerships and financing.

WBOs are generally characterised by a deep rootedness within their host communities, which is an important foundation of shared governance and orientation toward participatory and democratic organisational models. This conditions the strategic choices that WBOs make by disincentivising choices that may negatively impact the community. For example, decisions to outsource or delocalise production or to restructure the organisation to improve efficiency can be considered contrary to the system of values and to the economic and social needs that the WBO aims to protect. Therefore, such choices are generally avoided unless they are necessary for the organisation's survival and continuity.

Relationships with external stakeholders are essential to make the WBO a form of shared governance that is integrated into a community's social and value system. A further and significant manifestation is the acquisition of

skills and professional experience useful to complement the organisation's internal competencies. Such skills and experience are necessary to establish the WBO and sustain the new business project over time. Similarly, external stakeholders can provide access to a network of contacts and relationships that can facilitate the acquisition of resources and new business opportunities.

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Innovation and Covid-19 crisis: Evidence from Italian medium-sized firms

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Abstract

The purpose of this study is to analyse the conditions under which businesses have addressed the Covid-19 outbreak. Specifically, we focus on the pre-pandemic innovation profile of firms by considering the different levels of economic performance of medium-sized firms (top, middle and bottom performers). An exploratory analysis was carried out analysing data concerning 281 medium-sized firms in the Marche region of Italy in 2019 (pre-pandemic period); data were collected from the AIDA database (Bureau Van Dijk—A Moody's Analytics Company). Findings highlight the different conditions in which medium-sized Marche firms confronted the crisis. On the one hand, there are the top performers that invest more substantially in innovation and show both higher levels of productivity and a financial structure which is solid and at minimal risk of default. On the other hand, there are the medium and low performers, marked by undesirable characteristics, such as low levels of innovation, poor productivity, and a weak financial

structure with high exposure to financial stress. What starts to emerge through the analysis of the firms' profiles is a sort of circular logic which, in favourable conditions, takes the form of a virtuous circle, while in unfavourable conditions it translates as a vicious circle. Although this paper presents research outlights relative to an explorative step, it offers a relevant theoretical, managerial and policy implications.

Keywords – Innovation, Covid-19 crisis, resilience, performance, medium-sized firms.

Paper type – Academic Research Paper

1 Introduction

The economic disruption caused by the Covid-19 pandemic is severely testing the resilience of entrepreneurial systems throughout the world (Confindustria, 2020; Cerved, 2020; OECD, 2020). It is still unclear how long the pandemic will last, but what is certain is that the way of doing business has changed radically (Am et al., 2020; Bradley et al., 2020) and that innovation is no longer an option but the *sine qua non* for business survival and success (Am et al., 2020; Breier et al., 2020; Modina et al., 2020). Many studies have examined the impact on organizational and economic business performance (Bradley et al., 2020; Carletti et al., 2020; Shen et al., 2020; Sharma et al., 2020; Song et al., 2021; Rapaccini et al., 2020). Other contributions have investigated the factors that may favour or hinder a firm's capacity to overcome the current crisis (Roper & Turner, 2020; Breier et al., 2020). In this regard numerous researches have put their finger on innovation as the condition enabling firms to achieve resilience (Hamel & Valikangas, 2003; de Oliveira-Teixeira & Werther, 2013; Linnenluecke, 2017; OECD/Eurostat, 2018). It is not yet known what the true impact of the crisis will be on firms. However, it is reasonable to expect that those firms that adopted farsighted behaviours in the pre-Covid period – especially in terms of investment and innovation (Istat, 2021) – will prove to be as more resilient and better able to exploit the first signs of economic recovery (Modina, 2020).

In this vein, we propose to explore and analyze the conditions under which businesses have addressed the Covid-19 outbreak. Specifically, we focus on the pre-pandemic innovation profile of firms by considering the different levels of economic performance of medium-sized firms.

An exploratory study was carried out in 2019 by analyzing archival data concerning medium-sized firms in the Marche region of Italy.

In this paper, we present the preliminary results of the first step of our empirical research. Findings reveal that medium-sized firms in the Marche region faced the crisis in different conditions. On the one hand, there are the top performers which, by comparison with other firms, are those that invest more substantially in innovation measures and show both higher levels of productivity and a robust financial structure, which is solid and at minimal risk of default. On the other hand, there are the medium and low performers marked by undesirable characteristics: low levels of innovation, poor productivity, and a weak financial structure with high exposure to financial stress.

The remainder of the article is organized as follows. The first section provides a literature review on SMEs, innovation and crisis, and introduces the research objective. In the second section, data collection, measures, and results are described. In the final section, the main findings are discussed and the theoretical and practical implications are presented, along with limitations and future research directions.

2 Literature review

The Covid-19 crisis and the great financial crisis (2008) have twofold similarities: 1) both are exogenous shocks rather than business-cycle fluctuations; and 2) both have equally affected firms through a sharp drop in liquidity. This will cause firms to rethink their strategic decisions about investments and savings (Roper & Turner, 2020). The pre-pandemic scenario – differently from the 2008 crisis – was (and still is) very dynamic, characterized by new technologies and digital innovations. The latter for example, have radically changed the nature and structure of new products and services, shaped novel value creation and value appropriation pathways. Within this context, the crisis represents a trigger factor that accelerated the need for innovation in business activities (Modina, 2020). The most recent studies suggest that the effects of the pandemic will be strongly asymmetrical among sectors (Cerved, 2020; Guerrieri et al., 2020; OECD, 2020). According to Istat (2021), both scale of impact and capacity to respond will depend upon structural factors, strategic orientation and the level of competitiveness prior to the crisis. A number of studies (Bradley et al., 2020) show that some top performers before the pandemic have actually increased their performance by hastening their growth, while the pandemic has dramatically widened the gap that already separated the low performers from the others.

Furthermore, scholars argue that SMEs are at greater risk of default (Palazzi et al., 2018; Sgrò et al., 2020) because they are weaker financially

(Dua et al., 2020) and less likely to introduce innovation (The Economist, 2020; Roper & Turner, 2020). In SMEs, cash constraints, in particular, may impact more strongly on R&D and innovation investments. However, lessons from the great financial crisis of 2008 suggest that SMEs with a greater willingness and ability to invest in R&D and innovation can increase their chances of survival during a downturn period (Coltorti et al., 2013; Amore, 2015; Jung et al., 2018; Castillejo et al., 2019). Studies show that SMEs have a significant capacity to survive, adapt and grow in the face of turbulent change, demonstrating marked resilience. Thus, although SMEs face constraints in terms of resources and skills, the attributes which distinguish them – such as flexibility, adaptability and innovation – are instrumental in fostering resilience. In this regard, the extant literature considers innovation as a crucial factor in guaranteeing and reinforcing organizational resilience (de Oliveira-Teixeira & Werther, 2013; Carayannis, 2014; Dahles & Susilowati, 2015; Roper & Turner, 2020; OECD/Eurostat, 2018).

The term ‘resilience’ is very much in vogue due to the endless succession of unforeseen calamities such as financial crises, natural disasters and health emergencies. This led the effect of shifting the strategic goals of many organisations from a so-called ‘quest for profits’ to a ‘quest for resilience’ (Hamel & Välikangas, 2003; Conz & Magnani, 2020).

Management studies contain numerous researches which – based on the assumption that resilience is the ability to keep pace with change and, after taking a hit, create new opportunities which look beyond mere recovery (Lengnick-Hall et al., 2011) – have investigated the conditions which enable businesses to become resilient. Hamel and Valikangas (2003) argue that one of the enabling conditions is innovation. Indeed, innovation makes it possible an ongoing basis for organizations to anticipate a vast range of potential sources of turbulence, and to adapt to the repercussions. de Oliveira-Teixeira and Werther (2013) point out that it is the ability to anticipate innovation and continuously to pursue it that makes a business resilient. The authors argue that resilient enterprises are the so-called ‘anticipators’, i.e. those able to anticipate technological changes, as well as the wishes and needs of the consumer and other emerging trends. In the same vein, Huggins et al., 2014 argue that innovation represents one of the key competences of entrepreneurial resilience. Firms able to manage innovation embrace both ends of a continuum: continuity and change. They become ambidextrous organizations able to manage their current business and also search for new business opportunities that lie ahead (de Oliveira-Teixeira & Werther, 2013).

Taken as a whole, the studies highlight innovation as one of the conditions enabling a firm to develop resilience. In downturn periods, resilience emerges as a crucial factor in determining a firm's chances of survival and development. SMEs are very liable to fold in the wake of unpredictable events, as witnessed recently with the Covid-19 crisis; for these firms, making innovation a way of life represents a unique opportunity to face up to and overcome the challenges and changes that the current situation confronts them with. If, as claimed by Istat (2021), a firm's power to respond to the Covid-19 crisis will depend, at least in part, on certain previous behavioral characteristics – such as innovation investments – and structure (i.e. profitability, labor productivity, financial solidity), it would seem legitimate to investigate the firm's pre-pandemic profile.

Based on these premises, we aim to explore the conditions under which businesses have addressed the Covid-19 outbreak. Specifically, we focus on the pre-pandemic innovation profile of firms by considering the different levels of economic performance of medium-sized firms.

3 Methodology

3.1 Sample and data

An exploratory study was carried out by analyzing archival data in 2019 (pre-pandemic time) concerning medium-sized firms in the Marche region, Italy. To identify medium-sized companies we adopted the European Recommendation n. 2003/361/CE: number of employees (50–250) and annual revenues (10–50 million euros). These firms represent a significant cluster in the Italian economy – in terms of occupation levels and added value – and have peculiarities that are significantly different from larger and smaller ones – in terms of ownership structure, degree of managerialisation, internationalization level, innovation propensity, etc. – (Coltorti, 2004; Palazzi, 2011). Furthermore, they demonstrated considerable resilience during the great financial crisis thanks to their capacity to adapt strategies by introducing technological, organizational and market innovations (Varaldo, 2010; Coltorti et al., 2013).

The data were collected from the AIDA database (Bureau Van Dijk–A Moody's Analytics Company). It served to identify the sample, the financial performance, the innovation and productivity indicators, the number of patents, the financial structure ratios, and other data at a firm-level such as age, the number of employees, sector and province.

In order to identify the firm's pre-pandemic profile, the following indicators were adopted:

- The Ebitda margin which is equal to earnings before interest, tax, depreciation, and amortization (Ebitda) divided by overall turnover. This margin is a sound proxy indicator of the firm's ability to generate cash flow through its core business (Dolenc et al., 2012; Cesaroni et al., 2017);
- The innovation ratio, measured as intangible fixed assets divided by total assets. The level of intangible expenditure represents a common proxy for the level of innovative effort of firms (Rogers, 1998; OECD/Eurostat 2005, 2018). Other ratios considered are the development expenditure and the intellectual property expenditure divided by total assets, and the average number of patents (OECD, 2009; OECD/Eurostat, 2018);
- The productivity ratio, calculated by the value added per employee. It is widely accepted that the level of labor productivity is strongly affected by the firm's innovation effort (Hall et al. 2009; OECD/Eurostat, 2018; Istat, 2021).

Furthermore, we consider information regarding the capital structure of firms such as the financial independence ratio obtained by total equity divided by total assets, the debt to equity ratio is calculated by dividing total liabilities by stockholders' equity, and the liquidity estimated as the ratio between current assets minus inventory and current liabilities. In this way it was possible to identify the degree of financial solidity enjoyed by the firms before the Covid-19 outbreak.

The final sample was composed of 281 Italian medium-sized firms active in the Marche region at the end of 2019. The different clusters of firms according to their level of performance – bottom, middle, and top performer – were created using the quantile distribution of the Ebitda margin in 2019. Based on the three clusters, we carry out a descriptive analysis to explore the conditions under which businesses have addressed the Covid-19 outbreak, focusing on the pre-pandemic innovation profile.

3.2 Findings

The whole sample displays the following general characteristics. Distribution by province shows that the majority of firms are located in Ancona (33%), followed by Pesaro Urbino (27%), Macerata (21%), Fermo (11%) and Ascoli Piceno (8%). Distribution by business sector highlights manufacturing as the primary sector in which firms operate (76%), followed by commerce (10%) and services (8%). The average age of the firms was 29 years and the average number of employees was 99.

Findings (Table 1) show that firms belonging to the top performers' cluster – above the third quartile, 0.75 – reveal better innovation indicators

(4.16% intangible fixed assets divided by total fixed assets; 0.13% development expenditure; 0.44% intellectual property expenditure; 3.3 number of patents) than middle (4.01%; 0.08%; 0.36%; 2.49) and bottom performers (3.84%; 0.08%; 0.42%; 2.26). Hence, firms that during 2019 achieved high level performances, measured by the Ebitda margin, are those which invested more in innovation-related activities. In this sense, their pre-pandemic conditions – in terms of profitability and innovation – were crucial to facing the economic crisis caused by the Covid-19 pandemic, and very likely instrumental in increasing the capacity of those firms to survive and adapt their businesses to the turbulent context.

By contrast, firms that are part of the bottom performers' cluster – under the first quartile, 0.25 – show innovation indicators lower than the middle and top performer (3.84% innovation ratio; 2.26 number of patents). Thus, firms belonging to this cluster, in addition to low rates of profitability, are characterized by low investments in innovation. Consequently, those firms were worse equipped to weather the downturn period, and found that their very survival on the market was at risk.

Furthermore, greater innovative efforts are reflected in a significantly higher level of productivity. Taking into account the valued added per employee, results show that top performers evince a higher level of labor efficiency (92.305 euros) than middle (62.711 euros) and bottom (44.756 euros) performers. These results suggest something which is widely borne out in the literature (Hall et al., 2009; Istat, 2021): that major investments in innovation result in improvements to labour productivity.

Finally, complementary characteristics which help to supplement the firms' pre-pandemic profile all relate to financial structure. As it was reasonable to expect, these indicators are better for the top performing firms than the other clusters. Top performers prove more capable of repaying debts in the short term with current assets excluding stocks (2.28) compared to middle (1.16) and bottom performers (1.08): indicating a lower exposure to financial stress which reduces solvency problems concerning financial commitments already made. Regarding capital structure, measured by the equity ratio, results show that top performing firms demonstrate a favorable condition (0.44) compared to the middle (1.19) and bottom performers (1.30). The same result is corroborated for the financial independence ratio, which is higher for top performers (53.32) than others (34.38; 27.10): meaning that the composition of structural financial sources is mainly generated internally rather than externally. So, top performers appear less exposed with leverage, which translates as a greatly reduced probability of incurring financial default, hence increasing their chances of survival during the downturn period.

Table 1 – Findings: Description of firms' profiles

CLUSTERS (Ebitda margin)	INNOVATION (a) %	INNOVATION (b) %	INNOVATION (c) %	# PATENTS (a.v.)	LABOR PRODUCTIVITY (m€)	FINANCIAL INDEPENDENCE RATIO	DEBT TO EQUITY RATIO	LIQUIDITY RATIO
TOP								
mean	4.16	0.13	0.44	3.29	92.305,35	53.32	0.44	2.28
median	1.64	0	0.06	0	87.570,00	52.34	0.15	1.76
# 71 firms								
MIDDLE								
mean	4.01	0.08	0.36	2.49	62.711,00	34.38	1.19	1.16
median	1.34	0	0.07	0	59.490,00	30.25	0.77	1.05
# 140 firms								
BOTTOM								
mean	3.84	0.08	0.42	2.26	44.756,86	27.10	1.30	1.08
median	1.68	0	0.03	0	46.160,00	23.08	0.57	0.84
# 70 firms								
TOTAL SAMPLE								
mean	4.01	0.09	0.40	2.64	65.716,01	37.39	1.03	1.42
median	1.42	0.00	0.05	0.00	60.190,00	34.08	0.52	1.10

(a) Intangible fixed assets divided by total assets.

(b) Development expenditure divided by total assets.

(c) Intellectual property expenditure and similar costs divided by total assets.

Furthermore, correlation analysis (Table 2) was conducted to verify the association between all the variables observed.

Ebitda margin is positively and significantly correlated with innovation(c) ratio – intellectual property expenditures divided by total assets – (coefficient of .216). Moreover, it is strongly associated with labor productivity, positively and significantly (.752). Similarly, profitability is positively and significantly correlated with the financial independence ratio (.464) and liquidity ratio (.399); conversely, it is correlated with the debt to equity ratio in a significantly negative manner (-.125). These findings are consistent with the pattern which emerged from the analysis of the firm cluster: greater profitability is associated with higher investment in innovation, higher labor efficiency and a robust financial structure.

Innovation(a) – intangible fixed assets expenditure divided by total assets – is characterized by a positive and significant association both with innovation(b) (.275) – development expenditure divided by total assets –

and innovation(c) (.239) – intellectual property expenditure and similar costs divided by total assets –. Conversely, it is negatively and significantly correlated with financial structural ratios: financial independence (-.204), liquidity (-.202), and positively related to the debt to equity ratio (.141) In sum, a stronger commitment to innovation seems to be associated with better management of the financial structure of firms; in fact, also patents – average of number patents – shows a positive and significant correlation with the financial independence ratio (.177). Lastly, other correlations emerge. Labor productivity is positively and significantly associated both with financial independence (.354) and liquidity (.314). The financial independence ratio shows twofold significant correlations: it is negative with the debt to equity ratio and is positive with liquidity.

Table 2 – Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Ebitda margin	1								
(2) Innovation(a)	.037	1							
(3) Innovation(b)	-.002	.275**	1						
(4) Innovation(c)	.216**	.239**	.020	1					
(5) Patents	.036	-.048	-.032	.003	1				
(6) Labor productivity	.752**	.022	.054	.102	.033	1			
(7) Financial independence	.464**	.204**	-.104	-.014	.177**	.354**	1		
(8) Debt to equity	-.125*	.141*	-.047	-.006	.075	-.116	.375**	1	
(9) Liquidity	.399**	.202**	-.085	-.062	.061	.314**	.707**	.240**	1

* and ** significance at the 5%, 1%, respectively.

(a) Intangible fixed assets divided by total assets.

(b) Development expenditure divided by total assets.

(c) Intellectual property expenditure and similar costs divided by total assets.

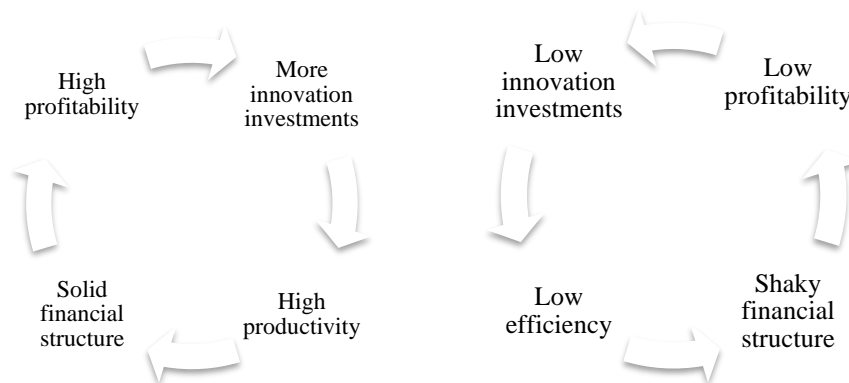
4 Conclusions

The findings offer an interesting overview of the business situation prior to the Covid-19 crisis. What begins to take shape through an analysis of the various firms' profiles is a sort of circular logic (Figure 1) which, in favorable conditions, confirms itself as a virtuous circle while in unfavorable conditions it translates as a vicious circle.

The firms which invest most heavily in innovation measures are those which evince a higher level of profitability – top performers – besides a robust financial structure and a high degree of labor productivity. This creates a virtuous circle in which innovation acts as one of the favorable conditions enabling the circularity to continue unbroken. The pre-pandemic profile of these firms can most likely increase their capacity to overcome, adapt and grow when faced with a turbulent context such as the Covid-19 crisis. In this case the crisis could represent a trigger factor that further stimulates the need for innovation.

Conversely, the firms which invest less in innovation are those which have a lower level of profitability – middle and bottom performers –, a weak financial structure and low labor efficiency. This appears to translate as a vicious circle which can threaten the survival of the firm in the event of unforeseen, adverse circumstances. Under these conditions, the Covid-19 crisis may well have put the resilience of these firms to a severe test.

Figure 1 – The circular logic: virtuous circle vs vicious circle



This study contributes extends current knowledge on SMEs management in adverse scenario by providing insights on a theoretical level. It supplements the existing management literature by providing empirical evidence collected from medium-sized Italian firms. This paper is one of the

first attempts to perform an exploratory analysis of the conditions under which medium-sized businesses have addressed the Covid-19 outbreak by focusing on their pre-pandemic innovation profile. Moreover, by doing so, the paper investigates a crucial factor in guaranteeing and reinforcing organizational resilience which, in times of crisis, can turn out to be decisive for the survival and continuity of the firm.

Analyzing the firms' profiles yields further food for thought and carries several managerial and policy implications as follow detailed.

Policy implications. The more innovative, more productive, with a solid financial structure, the top performers could benefit from ad hoc measures to consolidate their already favorable operating conditions. As leaders, these firms could pull less innovative firms, spreading best practices. Setting up the "businesses for innovation networks" could promote collaboration in introducing innovative measures, pooling experience, and forging strategic partnerships between members. The middle performers could profit from innovation support through tailor-made programs; they need for financial resources and human resources with specific skills. Implementing services capable of supporting and guiding middle performers in their strategic choices could prove crucial.

The bottom performers – not very innovative, not very efficient, and with shaky financial structures – could benefit from initiatives aiming to raise awareness of the significant impact of innovation on business performance, competitiveness, and continuity and to foster the spread of innovative practices. An example of this is the recent National Recovery and Resilience Plan (PNRR) that includes a series of measures designed to encourage and support innovation in the production system, especially SMEs. But, these enterprises suffer a lack of financial resources and managerial skills to manage scarce resources effectively. Financial resources devoted to innovation in this type of firm are not sufficient.

Our findings influence the action of the decision-makers so far as they need to adopt policies that are consistent with the different firm profiles to ensure the survival and development of the company.

Managerial implications. Top-performing firms' managers should adopt policies to reinforce favorable operating conditions with proactive strategic approaches by constantly monitoring and adapting to the changeable market, environmental, and social needs. Middle-performing firms' decision-makers should review the strategic choices taken to date to identify the weaknesses that hinder company growth. Similarly, bottom-performing firms' managers should implement corrective and developmental strategies capable of pulling the firm out of the vicious circle through new investments in innovation, human capital, and relational capital.

Like all studies, this paper is not immune from limitations, and future research could expand the present study in several ways. First, it represents an exploratory analysis and findings should be read with all due care because the sample is composed exclusively of Marche firms and might not reflect the situation in other regions. The replication of this analysis in a wider sample including all Italian regions could account more comprehensively for the innovative profile of medium-sized firms. Second, although balance sheet data have been widely used and shared in analyzing the degree of innovation of businesses, it should be stressed that – especially in smaller firms where innovation may follow informal channels and logics – such data may not fully capture the innovative effort of firms, with the risk of underestimating their endeavors in this field. Future research should take into account other innovation measures, such as organization practices, marketing methods, etc. Third, this analysis outlines the performance and innovative profile of firms based on the latest available data for 2019. The following step in this research will consist of integrating data concerning 2020 to check if and how the pre-pandemic innovation profile of firms had an influence on their real capacity to address and overcome the challenges of the Covid-19 crisis.

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The impact of covid-19 effects on the life cycle of romanian SMEs

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Abstract

In Romania there was a period of stopping the entrepreneurial phenomenon between 1950 and 1990, so that the evolution of SMEs was difficult and complex. In Romania, the first private SMEs appeared only in 1990, unlike most Central European countries, and due to the granting of the right to set them up, the existence of numerous niches not covered by other economic agents, the granting of fiscal facilities in the first years of relatively easy access, especially informally, to numerous resources in the state sector, this period after the 1990s is considered to be a period of relatively accelerated development of SMEs, although this development, especially quantitative, has been which SMEs were not in the forefront of the attention of the executive, the legislature or most of the political leaders of the time. However, the entrepreneurial spirit of a significant part of the population and the numerous economic opportunities manifested in the internal market have facilitated the creation of a relatively large SME sector, but with a relatively modest economic potential. The causes that contributed to this undesirable evolution are multiple, these being "related" to the unfavorable general economic situation and not granting a differentiated treatment to SMEs, given the waiver of facilities granted in the previous period for the first years of operation. After 2000 it is considered - the period of SME recovery considered as the period in which the macroeconomic background of the evolution of the SME sector registered important changes in terms of relaunching industrial activity, rapid growth of the services sector, continuation of dynamic evolution of trade and construction, the substantial increase in the volume of investments from domestic and especially foreign sources, the rapid growth of imports and exports, the former devastating the latter, the proliferation of the *acquis communautaire* and the transition to its implementation consistently, increasing

convergences between the Romanian economy and the EU economy as a result of the processes of pre-accession and effective integration of Romania into the European Union. The main purpose of the article is to analyze how the life cycle of SMEs in Romania during the COVID-19 crisis.

Keywords –SMEs, Life cycle, Economy, Enterprises

Paper type – Academic Research Paper

1 Introduction

In only a few decades, there have been important changes in the economic, social, informational, educational, cultural and political, sometimes difficult to anticipate. The important role that small and medium-sized enterprises (SMEs) play in the economies of most countries of the world and, first of all, in that of developed countries, has aroused, in recent decades, the special interest of specialists for this category of enterprises (Erikson and Erikson, 2017). SMEs that contribute to the creation of a significant number of jobs, absorbing part of the available labor force as a result of the restructuring of the economy, can influence, through their mobility and flexibility, the process of adapting production to market requirements (Alain, 2010). In Romania, SMEs act to diminish the monopolistic role of large enterprises, to increase the employment rate, to increase competitiveness, thus generating through profitability, their dynamism a strong impact on the entire economy. The adaptation to the requirements and market dynamics of SMEs induces a series of specific elements both in the theoretical approach and in the ways of practicing management within them. The treatment of SMEs as a distinct field, but integrated to the general management is due to the own forms of manifestation of the managerial process in SMEs. The activity of SMEs takes place both under the influence of general environmental factors and under the influence of specific factors, which are constraints that make their mark on managerial processes.

In Romania, small and medium enterprises are defined according to a single criterion: the number of employees. However, the existence of a single criterion represents, from our point of view, a compromise, but a necessary one, especially in terms of the fiscal facilities granted to them. Undoubtedly, the last decades have been characterized by the fastest and most spectacular changes in human evolution. In only a few decades, there

have been essential changes in technical, economic, social, informational, educational, cultural and political terms, which were difficult to anticipate. Among the essential economic changes is the placement of small and medium enterprises (SMEs) in the forefront of development, by transforming them into the most dynamic economic factor. The enterprise means any form of organization of an economic activity, autonomous patrimonial and authorized according to the laws in force to make acts and deeds of trade, in order to obtain profit by making material goods, respectively services, from their sale on the market , in competitive conditions.

Micro, small and medium-sized enterprises (SMEs) account for 99% of EU businesses. They provide two thirds of private sector jobs and contribute more than half of the total added value created by EU businesses. Various action programs have been adopted to increase the competitiveness of SMEs through research and innovation and to improve access to finance. The goals of carbon neutrality and achieving the digital transition have also been taken into account in the strategies adopted in order to ensure better framework conditions for SMEs. In addition, the impact of the COVID-19 pandemic has stimulated new reflections on economic recovery, reconstruction and strengthening the resilience of SMEs.

SMEs operate mainly at national level, with relatively few engaged in cross-border trade within the EU. However, regardless of their scope, SMEs are subject to EU law in various areas, including taxation, competition and company law.

Micro-enterprises and SMEs make up 99% of all EU businesses. In 2020, almost 23 million SMEs generated EUR 3.9 trillion in value added and provided jobs for 90 million people, a key source of entrepreneurship and innovation, vital for competitiveness of EU businesses. The EU's SME policy aims to ensure that the Union's policies and actions take into account the needs of small businesses and contribute to transforming Europe into a more attractive place for business creation and business.

Small and medium-sized enterprises (SMEs) are the engine of the European economy. They lead to job creation and economic growth and guarantee social stability. In 2019, more than 21 million SMEs will provide 88.8 million jobs across the EU. Nine out of ten companies are SMEs, and SMEs also generate two out of three new jobs. SMEs also stimulate entrepreneurship and innovation across the EU and are therefore crucial to boosting competitiveness and employment.

Given their importance to Europe's economy, SMEs are a major goal of EU policy. The European Commission aims to promote entrepreneurship

and improve the business environment for SMEs, enabling them to realize their full potential in today's globalized economy.

The company knows as human life a cycle consisting of four stages birth (launch) development, maturity and decline - with its own characteristics and applicable strategies. The establishment of the life cycle of the enterprise is based on the definition of the company through the prism of the business portfolio held, the company representing a system established in order to achieve pre-established objectives and consisting of one or more business units (source). Depending on its size, but also on the long-term goals pursued, an enterprise can focus on a single strategic business unit, in which case its life cycle follows the cyclical evolution of that business or can contain several businesses. In the latter situation, the analysis of the life cycle of the enterprise is more complex and the particularities derive from the nature, dominance and the stage of life of the included businesses.

2 Literature review

In the literature, the concepts about small and medium enterprises explain almost all aspects related to their role in the economy, quantitative and qualitative evolution, disputes over the definition criteria. There are SMEs of different shapes and sizes, however, in today's complex business environment, they may have close financial, operational, or governance relationships with other enterprises (Linton et al, 2007). These relationships often make it difficult to clearly distinguish between an SME and a larger enterprise. The definition of SMEs is a practical tool designed to help SMEs identify themselves, so that they can then benefit from the full support of the European Union and its Member States (Halldorsson and Kovacs, 2010).

One of the main objectives set out in the Recommendation on SMEs is to ensure (support) that support measures are provided only to those enterprises that really need them (Taticchi et al, 2012). The definition of SMEs therefore applies to all policies, programs and measures that the European Commission develops and operates for SMEs. This also applies to types of state aid for which there are no ad hoc guidelines. However, classifying a company as an SME is not as simple as one might think. Not all state aid rules follow the strict interpretation of the definition of SMEs (Ilgin et al, 2010). Some rely directly on it, others only partially apply the definition of SME; In addition, there are specific guidelines that apply in certain cases. Therefore, it is always necessary to carefully check the appropriate legal basis, if an enterprise receives state aid (Henry, 2020).

In determining whether or not an enterprise is an SME, the size of the enterprise (employees, turnover and balance sheet total) is not the only factor to be taken into account. In fact, a business may be very small in these

terms, but if it has access to significant additional resources (for example, because it is owned, affiliated or in partnership with larger businesses), it may not be eligible for SME status. Therefore, for enterprises with a more complex structure, a case-by-case analysis may be necessary to ensure that only those enterprises that fall within the “spirit” of the SME Recommendation are considered SMEs (Keitsch and Vermeulen, 2020).

In a single market without internal borders and in an increasingly globalized business environment, it is essential that measures to support SMEs be based on a common definition. The lack of a common definition could lead to uneven application of policies and therefore distortions of competition between Member States. An undertaking in one Member State, for example, may be eligible for aid, while an undertaking in another Member State with the same size and structure may not be eligible. A common definition contributes to improving the coherence and effectiveness of SME policy across the EU. In addition, it is all the more necessary given the broad interaction between national and EU measures to help SMEs in areas such as regional development and research funding (Liberti, 2017).

It is also important to truly identify which businesses are SMEs, as SMEs need assistance that other businesses do not need. Compared to other enterprises, SMEs face a unique set of problems (Manea, 1997):

1. Market failures: True SMEs often face market failures that make the environment in which they operate and compete with other actors more difficult. Market failures can occur in areas such as finance (especially venture capital), research, innovation or environmental protection rules. SMEs may not be able to access funding or invest in research and innovation or may not have the resources to comply with environmental regulations;

2. Structural barriers: SMEs often also have to overcome structural barriers such as lack of managerial and technical skills, as well as labor market rigidities and limited knowledge of opportunities for international expansion.

Given the relative scarcity of funds, it is important to maintain the benefits of SME support programs for real SMEs. In view of this, the definition includes several measures against circumvention. The simplified approach of this guide should not be used to justify the creation of artificial corporate structures in order to circumvent the definition (Ritzer, 2007). The definition of SME distinguishes between three categories of enterprises. Each category corresponds to a type of relationship that one company might have with another. This distinction is needed to establish a clear picture of the economic situation of an enterprise and to exclude those that are not true SMEs. The categories are as follows (Stiglitz, 2008):

- 1) *autonomous*: if the company is either completely independent or has one or more minority partnerships (each less than 25%) with other companies;
- 2) *partner*: if the participations in other enterprises reach at least 25%, but do not exceed 50%, the relationship is considered to be between partner enterprises;
- 3) *affiliated undertaking*: if the participations in other undertakings exceed the 50% threshold, they are considered affiliated undertakings.

According to the definition, an enterprise is “any entity that carries out an economic activity, regardless of its legal form” (Liberti, 2017).

In Romania, the definition of SMEs takes into account the following three criteria (Liberti, 2017):

- 1) number of employees;
- 2) annual turnover;
- 3) the total annual balance sheet.

The category of micro, small and medium enterprises consists of enterprises that (Liberti, 2017):

- a) have less than 250 employees;
- b) either have a turnover not exceeding EUR 50 million or a total annual balance sheet not exceeding EUR 43 million

The fulfillment of the criterion of the number of employees is mandatory for the classification in the SME category. However, an undertaking may choose to meet either the turnover or the balance sheet criterion. It does not need to meet both requirements and can exceed one of these thresholds without impact on SME status (Sachs and Ki-moon, 2015). The definition offers the above option, because, by their nature, enterprises in the commercial and distribution sector have higher turnover values than those in the manufacturing industry (Bartles, 2019). The ability to choose between this criterion and the overall balance sheet, which reflects the overall prosperity of an enterprise, ensures that SMEs involved in different types of economic activities are treated fairly (Patel, 2017).

By comparing these data with the thresholds for the three criteria, a Romanian enterprise can determine whether it is a micro-enterprise or a small or medium-sized enterprise (Liberti, 2017):

- 1) micro-enterprises are defined as enterprises with less than 10 employees and whose annual turnover or annual balance sheet total does not exceed EUR 2 million;
- 2) small enterprises are defined as enterprises with less than 50 employees and whose annual turnover or total annual turnover does not exceed EUR 10 million;

3) medium-sized enterprises are defined as enterprises with less than 250 employees and whose annual turnover does not exceed EUR 50 million or whose total annual balance sheet does not exceed EUR 43 million.

The number of employees is a mandatory criterion for determining whether an enterprise can be considered an SME and, if so, in which category of SMEs it falls. If an enterprise does not meet this criterion, it cannot be considered an SME (Rogers, 2007).

The criterion of the number of employees includes full-time, part-time, temporary and seasonal agents and includes the following (Westland, 2007):

- a) employees;
- b) persons who work for the enterprise, who have been seconded to it and who are considered to be employed in accordance with national law (this may also include temporary or temporary employees);
- c) owners-administrators;
- d) partners who carry out a regular activity within the enterprise and who benefit from financial advantages from the enterprise.

The basic number of employees is expressed in annual units of work. People who have worked full time in an enterprise, or on its behalf throughout the reference year, count as a single unit (Raynolds, 2007). Part-time staff, seasonal workers and those who have not worked throughout the year are treated as fractions of a single unit (Barros et al, 2015).

The life cycle of a small or medium enterprise means a succession of stages, states, phenomena, completed in a process of initiation, creation, development, consolidation, expansion, maturity, respectively decline and withdrawal from the business world, with direct reference to a small or medium enterprise (Gupta and Verma, 2015). The life cycle represents the totality of these stages, and their succession has, naturally, a special importance in understanding the whole process.

3 Aim of the research

The main purpose of the research study is to analyze the way of life of the stages of the life cycle of SMEs in Romania:

E1. The actual creation of the enterprise: it is represented by the time interval allocated to the creation / effective establishment of the small or medium-sized enterprise.

E2. The actual start of the activity of the small or medium enterprise: it represents for the entrepreneur a very important challenge.

E3. The actual development of this new small or medium enterprise: natural consequence of the previous stages, regardless of whether the start-up period was shorter or longer, whether it was marked by insurmountable

problems (at some point), difficult or only the usual, ie normal from an entrepreneurial-managerial point of view, development is a stage that the entrepreneur wants to (get) as soon as possible, in the economy and in the context of the (complex) process of successful launch in the world business.

E4.Strengthening the market position: this stage is deeply and intimately linked (often even dependent or strongly influenced) to the actual development stage of the enterprise, which it continues with specific tools, appropriate to the new "*historical moment*" of the cycle its life.

E5.Expansion: stage in the life cycle of a small or medium enterprise, much desired and long awaited by the entrepreneur, but also by his family and collaborators, and even by most of the stakeholders of the enterprise.

E6.The maturity of the enterprise is the stage in the life of a small or medium enterprise, associated to a large extent with the previous one, due to the fact that in most of the cases it continues the one of expansion.

Based on the purpose of the scientific research, the following objectives were drafted through which the necessary information was identified:

- 1.Analyzing the management characteristics in the first stages of the life cycle of SMEs
- 2.Identifying and analyzing each stage of the life cycle;
- 3 Identifying the connections between the stages of the life cycle;
- 4.The mutual influence of life cycle stages in SMEs.

Based on studies and theories in the field of literature and personal observations, the following hypotheses were formulated:

H1: There is a strong correlation between the stage of the actual creation of the enterprise and the stage of the actual start of the activity

H2: There is a very significant positive relationship between Strengthening the market position of SMEs and the Expansion of SMEs;

H3: Between the stage at which SMEs have reached Expansion and the stage at which SMEs are at Maturity there is a very significant significant positive relationship.

4 Research Methods

After establishing the objectives and the hypotheses underlying the research study, the research plan was designed which included the following steps:

Step 1 - Establishing the research community: managers in Romania;

Step 2 - Identification of the survey unit: it is represented by the managers of SMEs in Romania that are part of the fields of activity: industry, agriculture, tourism and infrastructure.

Step 3 - Elaboration of the questionnaire: instrumental that was the basis of the article and with the help of which the opinion of the managers was polled.

Step 4 - Determination of the sampling method: simple random sampling was used. Subjects who were the subject of the scientific research study were selected based on two criteria: availability and accessibility.

Step 5 - Exploratory quantitative analysis: we resorted to the approach of a quantitative statistical-mathematical analysis, for data collection using the questionnaire as a research tool. We chose this type of analysis because it aims primarily to verify the theories and hypotheses issued on the subject, using structured techniques, quantitatively measurable (using indicators of dispersion, central tendency and correlation) having an evaluative, predictive and causal. Data collection took place between January 2021 - September 2021, using the questionnaire. A number of 623 valid questionnaires were obtained.

In the processing, processing and analysis of the collected data, the special statistical research software S.P.S.S. (Statistical Package for Social Sciences), with which the Spearman rho correlation coefficient was calculated.

5 Findings

Following the analysis of the correlation coefficient Spearman rho we can see the following correlations between the stages of the life cycle of SMEs: The actual creation of the enterprise, the actual start of the activity, the actual development (Table 1):

Table 1. Spearman rho correlation coefficient values for SME life cycle stages

Spearman's rho		1.The actual creation of the enterprise	2.The actual start of the activity	3.The actual development
1.The actual creation of the enterprise	correlation coefficient	1.000	.923**	.908**
	Sig. (2-tailed)		.000	.000
	N	328	328	328
2. The actual start of the activity	correlation coefficient	.923**	1.000	.929**
	Sig. (2-tailed)	.000		.000
	N	328	328	328
3.The actual development	correlation coefficient	.908**	.929**	1.000
	Sig. (2-tailed)	.000	.000	
	N	328	328	328

Source: developed by the author based on the collected data

1. The analysis of Table 1 shows a very significant positive relationship between 1. *The actual creation of the enterprise* and 2. *The actual start of the activity* ($\rho = 0.92$, $df = 328$, $p < 0.001$). From the scatter plot (Figure 1) it can be seen that the point spread is relatively limited, which indicates a strong correlation ($R^2 = 0.87$). The slope of the scattering of the results is a relatively straight line, indicating a linear rather than a curvilinear relationship. Thus we can say that Hypothesis 1 has been validated.

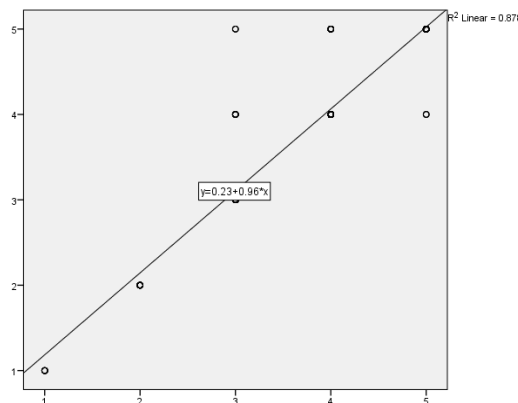


Figure 1. Scatter diagram - the correlation between the elements of the actual creation of the enterprise and the actual start of the activity

Source: developed by the author based on the collected data

This stage correctly and concretely marks the moment when the small or medium enterprise is very close / shortly before the start of its effective operation. The effective establishment / creation of the enterprise, both from a legal point of view, but also from a managerial point of view (ie decisional, informational, organizational, respectively of human resources), is, in most cases, in direct, integral responsibility. of the entrepreneur, the partners or the consultant requested to deal with exactly this fact: the establishment of the small or medium enterprise.

The stage requires, further, the start of natural steps to create long-term relationships between the company that is established and its stakeholders, other than the entrepreneur, his family and, possibly, the group of partners. Among these standard interest holders of a small or medium enterprise, which can be detected since its establishment, we mention: managers, internal collaborators, financing-lending institutions, employers' organizations, government institutions, non-governmental institutions, local public administration, community local, business partners (suppliers, customers, external collaborators), business partners (consultants), business partners (contractors and subcontractors).

As a result, the start of the activity, carried out carefully, rigorously, respecting the legislative conditions / restrictions, creates the premises for the subsequent development, even during the entire existence of the enterprise, of a profitable economic activity, first of all for the entrepreneur and his family the other associates (if applicable), but also for all stakeholders.

After all, most of them are represented by other companies, and the logic of "complex motivation of those involved in the activity of the company" is one that can create a necessary and even high level of mutual satisfaction, ie for all business partners involved.

This stage is realized with the clumsiness inherent in any beginning of the economic life and in the business world, it is carried out with small steps (economic and financial), with frequent interruptions, stumbles and returns. The attention of the entrepreneur and those around him, who are responsible for the destinies of the enterprise entering the world full of business convulsions, must be distributive, so that it can be observed and identified, often with emotion or even fear, but still with confidence. and hope, or even with that mad courage, specific to any beginning in which the entrepreneur believes, possible mistakes or erroneous evolutions.

2. It can be seen the existence of a very significant positive relationship between *1.The actual creation of the enterprise* and *3.The actual development* ($r = 0.90$, $df = 328$, $p < 0.001$). Figure 2, the scatter plot, reveals that the point spread is relatively limited, which indicates a strong correlation ($R^2 = 0.83$). The slope of the scattering of the results is a relatively straight line, indicating a linear rather than a curvilinear relationship.

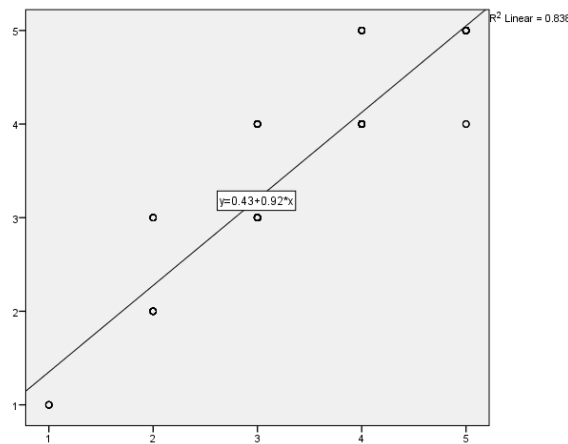


Figure 2. Dispersion diagram - the correlation between the elements of the actual creation of the enterprise and the actual development

Source: developed by the author based on the collected data

The actual creation stage of the small or medium enterprise is difficult, full of unpredictability, chronophagous, often requiring a long time. During this stage, the different opinions, approvals, authorizations must be obtained, the observance, at least at the minimum level, of the general principles of the scientific management, but also of the specific principles of its components must be ensured. The principles of rational structuring of the organizational component of the management fulfill a special role, on the observance of which also depends the correct realization of the overall “architecture” of the other components of the management system of the enterprise that is being established.

In most cases, for most small or medium-sized enterprises, in the period immediately following the important moment of its establishment, the level of intensity of its activity remains minimal. The next stage, of the actual start of the enterprise's activity, takes over and develops, as a rule, all the positive evolutions of the first stage of the life cycle of the small or medium enterprise. This stage is a first and important moment in which the entrepreneur has the opportunity to see that the company he has thought of, started and launched in business is really starting to work, moreover, that it is evolving correctly, and the chances of evolution are real and well defined. Moreover, the intensity of the company's activity increases permanently and constantly, which can be a trend for the entire period of time associated with this stage.

3. Between 2. *The actual start of the activity* and 3. *The actual development* there is a very large significant positive relationship ($\rho = 0.92$, $df = 328$, p

<0.001). The scatter plot reveals that the point spread is relatively limited, which indicates a strong correlation ($R^2 = 0.87$). The slope of the scattering of the results is a relatively straight line, indicating a linear rather than a curvilinear relationship (Figure 3).

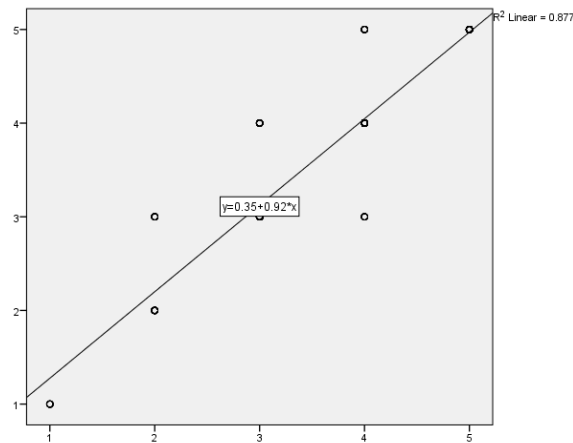


Figure 3 - Dispersion diagram - the correlation between the elements
The actual start of the activity and The actual Development
Source: developed by the author based on the collected data

The actual start-up of the newly established enterprise, as a second distinct stage of its life, usually takes place for a maximum of one year, in the case of an entrepreneurial environment conducive to entrepreneurial activities, but can even extend to several years, ie the first in the life of the enterprise, which are also the most difficult, in the situation when the entrepreneurial environment is only a permissive one, which accepts, without helping, the development of the activities carried out by small or medium enterprises. Starting, in itself, as a second stage in the life cycle of the company, can be a first period of "balance", because this is, from the perspective of competitors or other entities in the business world, the best time for concerted attacks.

Analyzing the correlation coefficient Spearman rho we can see the following correlations between the stages of the life cycle of SMEs: *Strengthening the market position, Expansion and Maturity of the enterprise* (Table 2):

Table 2: Spearman rho correlation coefficient

Spearman's rho		4.Consolidation of the market position	5.Expansion	6.Maturity of the enterprise
4.Consolidation of the market position	correlation coefficient	1.000	.821**	.934**
	Sig. (2-tailed)		.000	.000
	N	328	328	328
5.Expansion	correlation coefficient	.821**	1.000	.803**
	Sig. (2-tailed)	.000		.000
	N	328	328	328
6.Maturity of the enterprise	correlation coefficient	.908**	.929**	1.000
	Sig. (2-tailed)	.000	.000	
	N	328	328	328

Source: developed by the author based on the collected data

4. There is a very significant positive relationship between 4. *Consolidation of the market position* and 5. *Expansion* ($\rho = 0.82$, $df = 328$, $p < 0.001$). From the scatter plot it can be seen that the spread of the points is relatively limited, which indicates a strong correlation ($R^2 = 0.70$). The slope of the scattering of the results is relatively a straight line, indicating a linear rather than a curvilinear relationship (Figure 4). We can conclude that Hypothesis 2 has been validated.

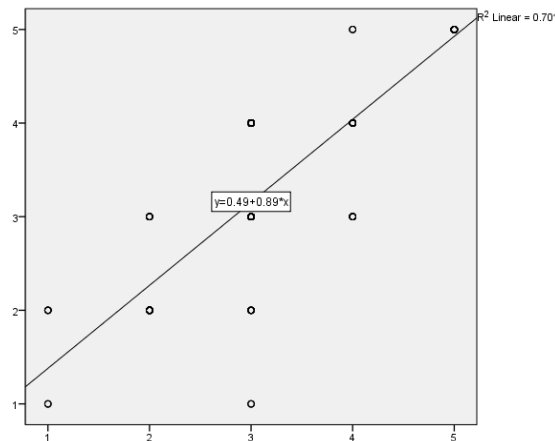


Figure 4. Scatter Chart - Correlation between Consolidating Market Position and Expansion

Source: developed by the author based on the collected data

For most small or medium-sized enterprises, run by their own entrepreneurs / managers, as much as possible according to the requirements of scientific management, but with obvious entrepreneurial valences, it creates by itself not only a natural need for "continuity" between these stages, but also a necessary and desired balance. In the same way we can say that a moderate intensity of activity, during the development period, can be followed by a strong intensity in this stage of consolidation, precisely so that the activities are "forced" to sit on a path imposed / required by entrepreneurial or, why not, the business world of which the now and recently established (but already developed and consolidated) small or medium enterprise is part.

5. Between 4. *Consolidation of the market position* and 6. *Maturity of the enterprise* there is a high positive relationship ($\rho = 0.75$, $df = 328$, $p < 0.001$). The scatter plot (Figure 5) reveals that the point spread is relatively limited, which indicates a moderate to strong correlation ($R^2 = 0.60$). The slope of the scattering of the results is a relatively straight line, indicating a linear rather than a curvilinear relationship.

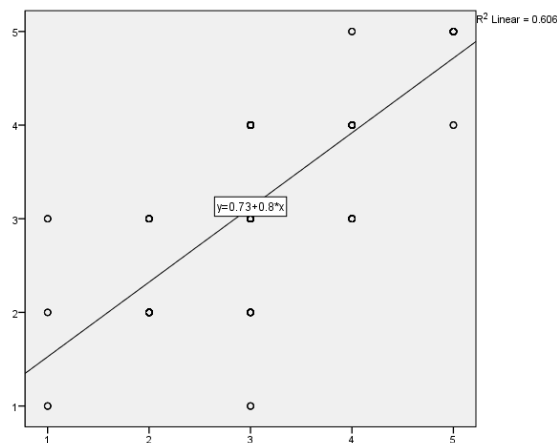


Figure 5. Scatter Chart - Correlation between Strengthening the Market Position and Enterprise Maturity

Source: developed by the author based on the collected data

The entry of the company in this stage of the life cycle confirms, most of the times, the positive results, already visible, even very important, of the vision, intuition, knowledge and efforts of the entrepreneur, the company manager or the company associates.

6. A very high positive relationship is identified between *5.Expansion* and *6.Maturity of the enterprise* ($\rho = 0.80$, $df = 328$, $p < 0.001$). The scatter plot (Figure 6) reveals that the point spread is relatively limited, which indicates a strong correlation ($R^2 = 0.71$). The slope of the scattering of the results is a relatively straight line, indicating a linear rather than a curvilinear relationship. Hypothesis 3 has been fully validated.

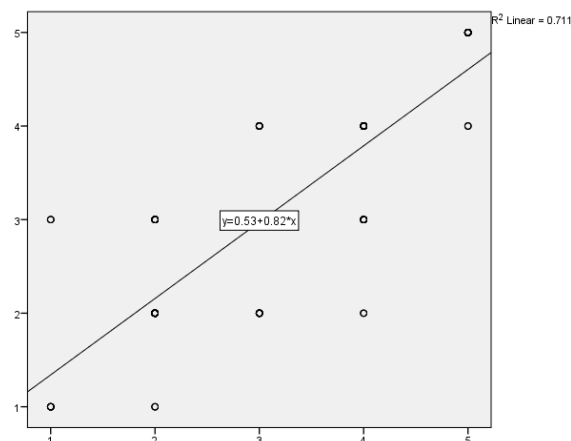


Figure 6. Dispersion diagram - the correlation between Expansion and Maturity of the enterprise

Source: developed by the author based on the collected data

The stage of maturity is, for most small or medium-sized enterprises, a decisive one, in fact the only so "serious" of those presented so far. The future of the company, the success of the next business, the "consistency" and firmness of the management practiced, the length of time the company will be present in business, in fact, its entire history, are "written" and made as a result of how I understand, accept and respect the imperatives of this stage of maturity.

4 Conclusions

From a theoretical point of view, the results obtained offer a perspective on the perceptions of the development of the life cycle stages of SMEs in Romania during the COVID-19 crisis. In this time of uncertainty, with unprecedented suspensions, SMEs have to make considerable efforts to access commodities, deliver products and access key markets. Depending on its size, but also on the long-term goals pursued, SMEs can focus on a single strategic business unit, in which case its life cycle follows the cyclical evolution of that business or may contain several businesses. In the latter situation, the life cycle analysis of the SME is more complex and the

particularities derive from the nature and the life stage of the included business.

The recognition of the role of the SME sector in the economic structure of a country, of its contribution in ensuring a balanced economic and social development determines the continuous preoccupation regarding its development, both at world level and at European and national level. The SME segment is the most active sector of a modern economy, a factor of technological progress and innovation that generates positive effects in an economy, such as:

- ✓ structural changes and redefining economic policies, in the context in which the SME sector is most affected by the economic and financial crisis, but at the same time it is the sector that can contribute substantially to the recovery of the economy as a whole;
- ✓ creating new jobs - the most effective way to fight unemployment;
- ✓ improving the competitive environment - leads to increasing the quality of products and services offered on the market, stimulates innovation and technology transfer and optimizes the use of resources;
- ✓ stimulating regional and rural development, for the fact that SMEs are a solution to reduce regional economic disparities by capitalizing on local resources, by the ability to meet local requirements based on detailed information they have on those markets;
- ✓ increase of investments, having as source the savings of the population and driving a multiplier effect of them;
- ✓ attracting foreign investments by providing quality related services necessary for their development;
- ✓ development of business infrastructure components, SMEs acting as specialized suppliers of parts, components and services for large enterprises;
- ✓ by stimulating competition, the possibilities of creating monopoly positions that would lead to price increases and inefficiencies in the combination of production factors are reduced;
- ✓ adaptability of the offer to customer requirements
- ✓ SMEs proving a high degree of flexibility, capacity for innovation, rapid reaction to changes in the economic environment and being able to occupy market niches that are not profitable for large enterprises.

Regarding future research directions, identifying the factors moderating the relationship between the stages of the life cycle of SMEs and the different marketing variables could be an important research.

The limits of the study undertaken are diverse, of which we emphasize: the time horizon chosen by us is quite narrow, because research topics often

generate studies of 50-100 years; the scientific approach was channeled on the interpretation of the studies and not on the explanation of the use of the obtained results; the inductive research methodology was easily accomplished.

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NFI for Early-Warning. CSR directive and insolvency directive: their composed impact on SMSs. Searching for a new model.

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Paper type – Academic Research Paper

1 Objectives and Approach

With the enactment of the IC-Code - Italian Corporate Crisis & Bankruptcy Law (Codice della Crisi d'Impresa e dell'Insolvenza), that will come into force in the next 2023, an organizational, administrative and accounting structure suitable for the nature and size of the company is being established. The goal of the legislature is to encourage companies to adopt a preventive approach and get early warning of crisis as required by the Insolvency Directive 2019/1023. Based on the use of the alert system managed by the IC-Code, some indicators must be established that can

predict the state of the crisis and its severity. Therefore, potential recessions or real crises should be intercepted and confirmed through indexes and indicators, which represent a large amount of information available to company management and corporate institutions. In order for all of this to happen effectively, financial indicators need to complement other non-financial KPIs. Similarly, in order to verify the adequacy of the company's organizational, administrative, and accounting structure, which in turn (also) produce information necessary to calculate the crisis index, it is appropriate to use indicators that are not only financial in nature. The proposal of the European Directive 2021/0104 of April 21, sets that the number of entities drafting non-financial statements needs to be significantly increased, including listed companies with less than 500 employees, that is, small and medium-sized enterprises and large companies whose securities are traded on the market. It does not introduce mandatory drafting of NF-KPIs for SMEs but includes the possibility that they can choose to draft structured non-financial disclosures voluntarily for inclusion in management reports, rather than in separate documents, based on specific standards and the principle of proportionality.

The paper aims to reflect on the role of non-financial information in early warning. The author's hypothesis is that since this particular category of information is forward-looking and focuses the attention of the company's management on the business prospects, it can certainly prove the opposite complementarity of intercepting and identifying critical situations.

2 Literature Review

Most of the literature on NFPI is devoted to assessing whether the use of these tools is correlated with an improvement in business results. Banker, Datar (1989), Feltham, Xie (1994), Holstrom (1979) and Banker, Potter and Srinivisan (2000) have shown that, consistent with the principles of agency theory, the inclusion of non-financial indicators in the assessment of management performance contributes to aligning ownership and management incentives, improving corporate profitability. In addition, the use of non-financial instruments to measure company performance also brings benefits from the management point of view, as documented by Eccles (1991), Johnson, Kaplan (1987), Kaplan, Atkinson (1989), Lambert (2001) and Schiff, Hoffman (1996). In general, it can be argued that a monitoring of business performance that takes into account qualitative elements allows signals from the market to be intercepted in advance of what would be possible by adopting only financial indicators (Barua, 1995). This allows management to take corrective action promptly (Rees, Sutcliffe

1994). The use of the NFPI mitigates any distortive effects in the financial data, providing a more accurate representation of the actual state of the company (Ittner et al. 1997). In practice, the NFPI related to corporate performance are primarily customer satisfaction (Anderson et al. 1994, 1997; Perera, 1997, and Ittner and Larcker 1998; Behin, Riley, 1999) and Total Quality Management (TQM) (Ittner, Larcker 1995; Symons, Jacobs, 1995; Chenhall, 1997). There are cases where the two NFPI mentioned are inadequate; therefore, the element that seems to have the greatest influence on the choice of NFPI of an enterprise is its strategy, which in turn depends on the competitive environment in which it finds itself (Ittner et al. 1997; Said, Hassabelnaby and Wier 2003).

The literature seems to strongly argue that integrating the management control system with NFPI improves profitability and that the use of NFPI is a function of the competitive environment in which the company operates, and the time horizon considered by its management. In particular, it appears that the adoption of NFPI aimed at monitoring i) the contractual power of the customers, ii) the overall competition rate, iii) the investments in technological innovation, iv) the quality of the products/services offered, v) the presence of explicit strategic plans and vi) the quality of human capital has positive effects on the prevention of insolvency in the long term.

3 Results and implication

The proposal for a European Directive 2021/0104 of 21 April 2021, which provides for a significant increase in the number of companies required to draw up NFPI Report (including listed companies with fewer than 500 employees, that is, SMEs whose securities are market treatment and large companies, even if not listed), does not introduce any mandatory Report for SMEs. Anyway it provides that they may opt for the voluntary drafting of structured NFPI dashboards. These can then be included rather in the management report or in a separate document, on the basis of dedicated standards and in consistency with a principle of proportionality.

Given the Italian productive/industrial structure which is characterized by thousands of SMEs, in the opinion of the authors, the adoption of a model which introduces both financial (FPI) and non financial performance indicators (NFPI) can benefit the health of companies and can help in the prediction of the crisis. In order to determine the correct non-financial KPIs for identifying potential crisis situations, the company should implement an effective management control system, which almost seems to have been implicitly enforced (Riva et al, 2020) to meet the requirements of adopting appropriate organizational, administrative and accounting models.

A basket of NFPI could therefore be of support to the Italian National Council of Chartered Accountants in order to develop a more effective crisis official prevention dashboard as required by the Italian law. Following this idea the dashboard 2021 OIBR Draft (*OIBR draft 2021: NFI for Adequate Governance and Early Warnings in SMEs.*) analyzed in the paper identifies KPIs for forecasting crises by proposing a set of possible non-financial data and structuring them according to the possible external (Corporate environment, Corporate reputation, Financial institution, Customer, Supply chain) or internal stakeholders involved (Products and services, Organizational model, Production, Cost structure).

Cross-Cultural Contexts

“Next Generation Italia” and interventions on Cultural Heritage in small historical towns: from opportunities to actions?

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Abstract

Not enough attention has been paid by academics and professionals to the regeneration of smaller cities, which hold major artistic heritage but have inadequate resources to leverage it and bring about positive societal impacts. However, the investment opportunities, offered by the “Next Generation Italia” plan, call on scholars and professionals to discuss how to valorise the great heritage of history, art, culture and traditions embedded in small Italian towns. This paper has adopted a qualitative approach and focuses on the case of Urbino, a UNESCO world heritage site, whose population and economic status are declining because the citizens and businesses are attracted by the lure of higher revenues and the better quality of life in nearby cities. Findings have revealed that culture and artistic knowledge and capabilities that belong to the tradition of a city rich in heritage can be the lever of innovation and boost civic wealth. However, searching the past in order to look to the future is a difficult task, and divergences in vision, resistance and even political tensions are among the factors that hinder the town’s regeneration.

Keywords – Civic wealth; cultural heritage; historic city centre, social innovation; urban regeneration, Unesco

Paper type – Academic Research Paper

1. Introduction: “Next Generation Italia” and culture interventions as a boost for sustainable development in small historical towns

The Italian Recovery and Resilience Plan (RRP), also known as “Next Generation Italia”, defines guidelines of interventions to overcome the economic and social impact of the pandemic, acting on the country’s structural nodes and successfully facing the environmental, technological and social challenges of our time. The relaunch action aims to restart growth and radically improve the competitiveness of the economy, the quality of work and people's lives (MEF, 2021).

Within the RRP, funds of almost €7 billion have been allocated to Tourism and Culture, namely two of the sectors most negatively affected by the Covid 19 pandemic. The aim is to increase the level of attractiveness of the country's tourist and cultural system through the modernisation of tangible and intangible infrastructures.

Furthermore, devoted interventions of more than €1 billion will be carried out to valorise the great heritage of the history, art, culture and traditions embedded in small Italian towns with natural, historical and cultural potential. Namely, these interventions aim to initiate cultural and creative activities, strengthen the social texture and identity of places and support participatory projects of cultural-based urban regeneration that focus on local communities.

These goals are in line with the global discourse launched by the New Urban Agenda (UN, 2016; UNESCO, 2018) and the 2030 Agenda (UN, 2015), which have opened up new avenues to integrate culture into policies for social and economic inclusion and environmental sustainability. The idea is that Cultural Heritage (CH) and creativity are linked to local places and communities, thus, directly and indirectly, contributing to several targets, particularly sustainable development goal (SDG) number 11 (to ‘make cities and human settlements inclusive safe, resilient and sustainable’). Indeed, CH is conceived as an element and a tool for socio-economic development (UN-Habitat, 2014; CHCfE Consortium, 2015) and an integral element of territorial capital, capable of influencing local economic dynamics since ‘it shapes cultural and psychological attitudes of local communities; represents an important component of local social and identitarian capital; enhances the creativity of the local intellectual and artistic milieu’ (Camagni et al., 2020:35). However, its conservation and valorisation are at the centre of a lively debate on who, what and how it contributes to revitalising cities, local areas and historical districts (UNESCO, 2008; Murzyn-Kupisz, 2012; Azmi et al., 2021).

In this vein, the revitalisation and the social upgrading of historical city centres have become a strong priority and an aspiration of urban policy in all parts of the European continent (Rudokas & Grazuleviciute-Vileniske, 2021).

In Italy, receiving public funds destined by the RRP for the regeneration of the CH represents a challenge that could generate multiple potential benefits for the community, if the funds are appropriately invested. Municipal administrations will be the protagonists who support the enhancement of the offer of cultural and creative activities, in partnership (co-design) with a great range of stakeholders: public and private actors, social institutions, organisations of the third sector, communities of inhabitants, cultural associations, and foundations (Del Baldo & Demartini, 2016; Di Ferdinando & Dini, 2019).

Hence, a deep inquiry on the readiness of a community to leverage cultural intervention is an antecedent aspect that explains how funds for CH interventions can be successfully allocated and managed. Accordingly, the following questions are leading our study:

- Who are the main actors involved in the safeguard, use and enhancement of the CH?
- Are there conflictual positions on interventions in the CH?
- How is a participatory approach ensured by the municipal administration?

To answer the questions mentioned above, this paper has adopted a qualitative approach. It focuses on the paradigmatic case of Urbino, a UNESCO world heritage site whose population and economic status are declining because citizens and businesses are attracted by the lure of higher revenues and the better quality of life in nearby cities. Maintaining the vibrancy and well-being of the community is a challenge for the local government, which launched a series of initiatives under the umbrella project named “Urbino per Bene” (Municipality of Urbino, 2016). Within this broader project and focusing on a specific initiative known as “the Relaunch of the DATA space” (the stables of Duke Federico da Montefeltro dating back to the Renaissance), this paper reconstructs the premises that activated the community process devoted to creating civic wealth by putting together different visions and perspectives on urban regeneration.

2. The Framework to reinterpret historical cities’ regeneration processes

To explore how to foster urban regeneration, several interdisciplinary contributions have begun addressing cultural heritage (CH), regarded by

scholars and policymakers as a driver of development - especially for historic cities - and a key element of civic wealth and urban sustainability (Cervello-Royo et al., 2012; Echter, 2015; Nyseth & Sognnæs, 2013; Nocca, 2017).

The enhancement and regeneration of the historic city centre are potentially considered as an opportunity for sustainable economic development based on the spur of culture and creative industries and sustainable tourism (Sacco, Ferilli & Blessi, 2014; Sacco, Ghirardi, Tartari & Trimarchi, 2019; Blessi et al., 2016; Ertan & Eğercioğlu, 2016). However, there was no lack of criticism on regeneration projects with the risk of abusing “the role of culture and creativity in urban processes to legitimise and even encourage organised forms of appropriation of common symbolic and material resources” (Sacco et al., 2019: 200). Culture-driven gentrification is one example of this type of appropriation (Atkinson & Bridge, 2005; Zukin, Kasinitz & Chen, 2015).

Existing literature has mainly focused on the regeneration of the historic city centres of large cities (Carillo, 2004; Zukin et al., 2015) or great tourist destinations (Martí-Costa & Pradel, 2011; Ginzarly & Teller, 2018), while, all over in Europe, there are examples of historical villages and towns suffering from unemployment, disengagement and economic stagnation (EU, 2015). In particular, Italian historical centres have progressively lost their social and economic attractiveness (Micelli & Pellegrini, 2018). Citizens have often moved out to search for jobs and opportunities, following the same trend of companies and institutions searching for more rational and better-connected locations. Often this happens because, in small towns that boast a great cultural heritage, the municipalities allocate the scarce funds only to restoration, while social and economic benefits are obtained if broader objectives of building conservation are set, including employment, training and the development of businesses.

The public administrators of larger cities as well often forgot to put the community at the centre of urban regeneration projects: in some cases, citizens have left historical quarters because their quality of life was clashing with large flows of overtourism (Jover & Díaz-Parra, 2020). No matter the case, cities lose their most valuable resource: the community (Higgings, 2020).

Communities (people who share a place, identity and interests) are actors for societal change and not merely passive beneficiaries (Glynn, 2019). Therefore, communities directly contribute to creating civic wealth, i.e., the creation of social, economic, and communal endowments that allow them to be self-sufficient (Lumpkin & Bacq, 2019; Bacq et al., 2020) and produce real societal impacts (Branzei et al., 2018). Hence, the engagement of the

broader community is critical in achieving positive impacts related to cultural-led urban interventions (Feehan & Zingsheim, 2019; Aureli, Del Baldo & Demartini, 2020 and 2021).

The cultural regeneration of a territory is achieved, indeed, through a plurality of cultural participative initiatives that involve different stakeholders and unfold over time (Biondi et al., 2020). A single project relating to the investment of contributions for the preservation of cultural heritage will not be sufficient to trigger a virtuous spiral of cultural, social and economic growth and impact on civic wealth. The idea behind this positive spiral is transforming people into 'cultural citizens' who, in turn, would nurture culture as an endogenous growth process (Sacco & Segre, 2009).

Therefore, it is a virtuous growth path that must be activated and nurtured over time and that requires an orchestrator(s), usually a public actor (Demartini et al., 2020).

A key issue is transforming the individual visions of single actors and, specifically, their means and ends into a joint understanding. As Della Lucia & Trunfio (2018: 36) argue, 'In the creation of a shared vision of urban development, the greatest challenge is to overcome the significant barriers that inevitably arise when a wide variety of stakeholders are involved, all with different backgrounds, power agendas, aims, roles and competencies.' For this reason, analysing the main actors involved in the safeguard, use and enhancement of CH, whether there are conflictual visions behind projects of urban regeneration and the role of Public Administrators (PA) in reconciling different positions and interests, is fundamental to understanding the readiness of a community to leverage its CH (Aureli, Del Baldo & Demartini, 2021; Aureli & Del Baldo, 2022).

3. The case study in brief

Urbino is a historic city dating back to the fifteenth century located in central Italy (Marche's region). It is a perfect synthesis between landscape and architecture. It represents an urban palimpsest, an example of resilience and transformation, due to the stratification in its historic fabric that allows one to trace different stages of its evolution marked by the supremacy during the Renaissance period. Urbino was the birthplace of the master painter Raphael and attracted some of the most outstanding humanist scholars and artists, eliciting the inclusion of the old city centre into the UNESCO World List of Heritage cities in 1999: 'Urbino represents a vertex of Renaissance art and architecture, so it has harmoniously adapted to its physical environment and its medieval past, becoming a completely exceptional city.'

However, its tourism vocation, held up in particular by the Ducal Palace, does not represent its main economic vocation. The city's economy mainly relies on the University of Urbino (dating back to 1506), located in old buildings inside the walls of the city centre, which had about 13,000 enrolled students in 2019 and generates jobs and other satellite activities (Maggioni, 2017). Currently, the student population is almost equivalent to that of the native inhabitants (14,468). Moreover, while only 1000 of them live in the historic centre, the city campus hosts students from different social and geographical backgrounds who populate the classrooms, libraries and laboratories located in the old city centre.

In focusing our attention on a specific urban regeneration project, the so-called "Relaunch of DATA space" project, embedded in the UNESCO site management plan, we applied a purposeful sampling technique (Etikan et al., 2016; Patton, 1990). Namely, we aimed to select a project among the different initiatives launched under the umbrella project named "Urbino per Bene", supported by the Italian Minister for Culture, that: a) was identified as an urban regeneration project for the development of a UNESCO cultural heritage site; b) had received attention and media coverage at the regional level; c) included a considerable number of different initiatives and expected impacts; d) implied the involvement of different stakeholders and consequently was capable of revealing the main actors involved in the safeguard, use and enhancement of the CH.

The "DATA space" is located in the ancient stables of Duke Federico da Montefeltro, built by the famous architect Francesco Di Giorgio Martini in the fifteenth century as a part of the nascent Ducal Palace.

The DATA provides an example of a historical and military place converted into a cultural and economic engine. Thanks to the intervention of a prestigious architect Giancarlo De Carlo, in 1998, it was renovated and transformed into a three-storey building, to make it a multifunctional centre (see Table 1) equipped with a library, exhibition spaces and a multimedia study centre.

Table 1 – DATA’s Laboratory

LAB	Didactic workshops to share experiences and skills: crafts and co-working courses. The Mediateca and the Medialibrary offer a large heritage of books, music, cinema.
TÓ	You can bring items, clothes and furniture here to exchange. It is also used for seminars, conferences and musical events.
TATA	You can bring your plants, which are entrusted and cared for by real green thumbs.
BLABLA	This is a tandem space where you can learn a foreign language by conversing with a native speaker. In addition, the bistro serves as a meeting place.
"Bring a Book" Library	The goal is to create a library through the contributions of book owners. The DATA must host a space dedicated to reading.
LÍ-LÁ	Renters and owners can post their offers here.
Laboratories	Participatory Urban Planning Lab, Social Lab, Theatre Lab, Cinema Lab and Innovation Lab. Ease of use of spaces by associations for organising initiatives and events.
GNAM	A free space to bring, taste, share and buy the typical dish of the local area.

The functional re-qualification and re-functionalisation Executive Project was led by the University department of Communication Sciences, supported during the experimental phase by a Business Angel incubator (BpAngel Association) and partnered by several local institutions and schools as follows: ISIA-the Higher Education in graphic design and visual communication located in Urbino, University of Urbino Carlo Bo, Ca' Romanino Foundation, The Artistic High School of Urbino, National Institute of Bioarchitecture. The amount of the financial provision for the project was one hundred and fifty-thousand euros.

Besides being a place dedicated to fun, culture, relaxation, dining and art, DATA also hosts business meetings among local companies to favour business matching. It is also a place aimed at entrepreneurial stimulus, where tests are carried out for its possible use by local companies.

3.1. Information collection and analysis

Information was obtained from six semi-structured interviews with key representatives of the main institutions involved in the DATA project, namely the following: the prior Councillor of the Municipality of Urbino appointed for the city planning and, currently, for Tourism; three representatives of the local art schools involved in the project (i.e., ISIA-the Higher Education in graphic design and visual communication; the Academy of fine arts; the Artistic high school of Urbino); the local representative of the Trade association of crafts and small businesses and the CEO of the Business Angel incubator appointed by the Municipality to support the most promising business ideas, which emerged within the Labs organized at “the DATA space”.

In our interviews, the DATA project opened a discussion on the role of CH in the city of Urbino. Hence, the focus moved from the new functions attributed to the DATA space to the vision and strategic plan of the city of Urbino.

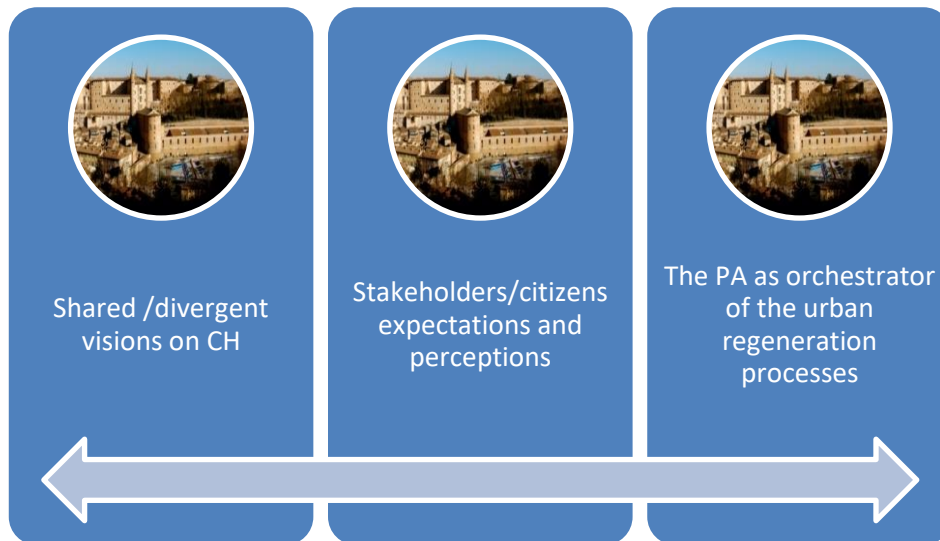
Insightful information was also obtained from a previous survey launched by the Municipality under the broader project “Urbino per Bene”, based on semi-structured questionnaires and interviews addressed to Urbino citizens, tourists and university students (Del Baldo & Demartini, 2021). Additional information was extracted from the analysis of public documents such as the municipality website, public speeches and the city strategic plan.

All the semi-structured interviews were recorded, and the notes taken during the meetings formed the basis to write more extensive reports at a later time. In our analysis, we found the use of excerpts highly worthwhile, as they draw attention to the interviewees’ perceptions. Regularly, the team members shared the outcomes of the interviews during face-to-face meetings and teleconferences to discuss questions arising from the empirical investigation and, thanks to a continuous process of back and forth between practice and theory, to grasp and identify the main features of the observed phenomenon.

4. Findings and discussion

The findings from the interviews reveal divergences of vision, resistance and even political tensions. In an attempt to understand these dynamics, the interrelated aspects depicted in Figure 1 that emerged from our study, are discussed below.

Figure 1-The main interrelated aspects



4.1. The shared/divergent visions on CH and culture-led regeneration projects

Starting with the analysis of DATA project's purposes, different visions of city regeneration emerged from the interviews.

From the point of view of the former Councillor for the city planning, who acted as the orchestrator of the DATA project, the latter initiative in itself represents a way to activate a catalytic process of the energies present in the territory. *'Experimenting with the DATA possibilities of use—letting an old space live and living in the space to make it feel alive and trigger ideas, energies, relationships and contaminations among different actors: youths, schools and university students, entrepreneurs, artists, etc.—made it possible to verify the concrete feasibility of the cultural, economic, tourist revitalisation project, leveraging local excellence.'* From his words, as well as from the interviews conducted with other economic actors, a predefined conception of the city's vocation did not emerge, but rather the awareness of the existence of cultural heritage and knowledge that can be recombined and revitalised through experimentation. *'The co-working activity has already generated a start-up that aims to market local traditional foods with the "Sapori del Duca-Flavours of the Duke" brand. The start-up was born and survived in the context of DATA in collaboration with BP Cube which acts as an incubator.'*

On the other hand, representatives from local art schools expressed a vision of regeneration of the territory more anchored to the enhancement of the exceptional nature of its cultural heritage. Although the cultural heritage

of Urbino, recognised all over the world, dates back to the Renaissance period, they believe that an important example of revitalisation took place in the 900s. For this, we can thank great men of culture (including Italian writers such as Volponi, Luzi, Parronchi and even the Noble Prize Ungaretti; scholars such as Carlo Bo and internationally renowned architects such as De Carlo), who were able to appreciate and enhance the city, seen as an example of beauty and culture. From this perspective, the words of the Director of the Academy of fine arts are exemplary: '*the historic centre of Urbino must rediscover its own identity and express a new renaissance, based on the principles of Humanism*'. Consistently, the DATA project should be 'a space *Devoted to Ars (Latin word that stands for talent/genius) and Techne (Ancient Greek word for know-how)*'".

The conception underlying the new functions to be attributed to heritage assets is, therefore, that of offering spaces to develop new technologies and skills for arts. '*A fluid space, a laboratory that recalls the humanistic conception of the knowledge of the enlightened Cortegiano, artist, scientist and scholar at the Duke's court*'. Therefore, the renewal of the city must focus on the enhancement of art, beauty and quality of life.

In summary, the historical legacy is an important lever for the renewal of Urbino according to all our interviewees, but its enhancement is conceived differently. However, without a common and concerted vision of the overall regeneration project of the city, the risk is remaining at the level of individual initiatives that disperse the potential of innovation.

4.2. The stakeholders/citizens expectations and perceptions of the PA's actions

The findings from the interviews revealed different visions of the city of Urbino and how the local government guides the city's development. The visions are linked to the different interests and needs of each stakeholder category. For example, on one hand, a representative of the entrepreneur category complains that: '*the culture and practices of Urbino have remained unchanged over the years*', while there are grand societal challenges to face; '*Urbino is a place of dreams, it does not innovate, politics does not think about the future*'.

On the other hand, representatives of local art schools indicated that Urbino is famous because of its artistic heritage, dating back to the Renaissance time but also the recent artistic graphic design movement of the early 900s. Therefore, Urbino's future shall be based on its physical cultural artefacts and artistic spirit: '*public investments should be devoted to the creation of libraries, museums and activities that can employ young people and artists so that they will not leave the city after they get their degree...investments*

should also focus on the aesthetic education of small traders, entrepreneurs and inhabitants that offer or ask for services that are in sharp contrast with the city's artistic beauty'.

Despite such differences, common bonds, attachment to the legacy of the place and the pride of belonging to an ancient and important city of Italian history were considered strong enough to bring about active collaboration from different stakeholders around a specific goal: making a public space named DATA a lively place where the regeneration of the city could start. The local municipality identified the desire for city regeneration as a shared interest capable of activating collaboration and generating change. The DATA project was born *'to serve as a commonplace to bring the energies of the territory and convey them to sustain the economic, cultural and touristic revitalisation of the city'* as reported by the Councillor for Tourism. The local municipality was the orchestrator that initiated the public debate and organised meetings on the usage of DATA, and it was the entity that allocated funds to this project. Discussions and great participation in meetings seemed promising. One year of experimentation in using the three floors of DATA to organise events, exhibitions, public meetings and open a co-working space for start-uppers, a library, a showroom of local products and a bistro also seemed successful in its attempt to attract artists, inhabitants, entrepreneurs and tourists. However, as reported by one interviewed *'the DATA project is still a work in progress...After one year of experimentation the project stopped, and now its vision is no longer clear'*. Most importantly, the project did not develop capabilities in the community useful for continuing the creation of civic wealth. The civic vibrancy given by the encounter of inhabitants, artists, students and entrepreneurs in the DATA space stopped very soon. One key strategy was partially missing: the engagement of all stakeholder categories. While the participation of supporters (i.e., the local municipality) was clear and demonstrated by the commitment to supply financial and human resources and an institutional endorsement to the project, community members and enterprises moderately contributed. Limited participation of students and inhabitants did not favour community empowerment, and the poor involvement of businesses did not favour the development of effective and long-lasting entrepreneurial solutions that can nurture the regeneration of a city after public funding has stopped (Young, 2006).

Strong communication and public meetings with citizens promising a participatory decision-making process in designing the uses of the DATA space generated an initial phase of enthusiasm and resource mobilisation. In addition to the restored building for DATA, volunteers, professional networks and personal relationships were devoted to the project and

contributed as material and immaterial resources to civic wealth creation by building cohesiveness and strengthening mutual interactions among stakeholders. However, the sharing of ideas, knowledge and expertise in such meetings did not fully translate into practice with concrete collaborative innovations outcomes, except for a few cases.

4.3. The Public Administrator as the orchestrator of the urban regeneration processes

The city's strategic plan (Municipality of Urbino, 2016) represented a first attempt to directly involving multiple actors and implementing a Historic Urban Landscape (UNESCO, 2011) approach to the urban regeneration project of the city centre, thus changing the top-down approach that was prevailing in the previous years when the PA acted more as a “patron of the heritage”. In this vein, the project “Urbino per bene” was conceived as a tool useful for triggering and improving dialogue with citizens and city users and collecting new and fresh insights (i.e., by addressing attention to the perceptions and perspectives of youth, tourists, city users and inhabitants of the centre). Hence, the results obtained from the questionnaire administered in early 2018 to students, tourists and permanent inhabitants (Del Baldo & Demartini, 2021) allowed the municipality to understand the coexistence of different and sometimes conflicting viewpoints, needs and perceptions among city users and to collect suggestions to trigger innovative ideas to make the historical centre more attractive and engage citizens (included youth) in the renewal and regeneration of the cultural and socio-economic fabric (Sacco & Segre, 2009).

The local PA played a key role in initiating collaborative actions, aimed at fostering dialogue and facilitating the composition of single “voices” and views and eliciting several projects, and among them, he launched the DATA project. From the municipality perspective *‘the DATA project is an experimentation to learn how to better involve citizens in the protection and revitalisation of the site’*. As the city planning councillor stated: *‘DATA was born as a commonplace to bring in the energies of the territory and represented a space for hosting and sharing, and a useful laboratory to trigger ideas, relationships and contaminations among different actors: youths, schools and university students, entrepreneurs, artists, and other city users. The experience made it possible to verify the concrete feasibility of the cultural, economic and tourist revitalisation project, leveraging local excellence’*. Hence, drawing from the PA’s point of view, it could be considered as the first initiative of a regeneration path embedded in the strategic plan of the city and the UNESCO management plan.

The local PA played a key role as a stimulator in starting collaborative actions and supporting the process of involvement and awareness of the various communities and city users and initiated a participatory governance approach (Biondi et al., 2019). His role was similar to that of ‘an orchestrator’, which entails gathering diverse actors, from public to private, industrial associations, local communities, as well as citizens (Abraham & Platteau, 2004; Della Lucia & Trunfio, 2018; Farinosi et al., 2018). *‘The current urban regeneration project requires a great number of financial resources; to complete it, new funding is needed. Private actors (i.e., entrepreneurs, associations and citizens) begin to move. All this is in line with the UNESCO management plan approved in 2013 which contemplates public-private synergies.’*

However, the PA is still at the initial step, which requires progress, and we deem that PA played the role of a stimulator and the participatory governance approach is still in its infancy (Abraham & Platteau, 2004; Sacco et al., 2014; Della Lucia & Trunfio, 2018; Farinosi et al., 2018). Other interviewees pointed out that different visions exist about the value they attributed to the CH in driving the socio-cultural and economic regeneration of the place. Such visions mirror and underpin different interests and expectations among stakeholders on the quality of life in a historic centre like Urbino and the perspective of urban revitalisation expressed by different communities with “different souls”.

5. Conclusions

The case study analysed revealed that culture and artistic knowledge and capabilities that belong to the tradition of a city rich in heritage can be the lever of innovation and boost civic wealth. However, searching the past in order to look to the future is a difficult task.

Empirical data allowed us to identify the main challenges that a city manager has to face: attract talent, create jobs and trigger the spur of new ventures; establish spaces for artists and cultural activities; preserve and promote local know-how; develop a strategy to attract SMEs belonging to the cultural and creative sector. Moreover, it shows the relevance of the involvement of multiple stakeholders in societal change initiatives and the importance of managing assets through public-private cooperation. However, it also identifies the missing elements that hindered the city to continue exploiting its potential related to cultural heritage (e.g., absence of a financing ecosystem available for the creative and cultural sector, scarcity of resources). Lastly, this paper highlights the power of participatory cultural initiatives (Biondi et al., 2020) used for the preservation, restoration

and revitalisation of physical heritage assets (Dameri & Moggi, 2019).

The practical implications of our research are as follows.

Preserving the city's identity while enhancing and revitalising traditional knowledge is a challenge for policymakers, called to instigate an innovative, collaborative and circular systemic approach for adaptive reuse of historic city centres by implementing a repertoire of successful heritage-led regeneration initiatives. Additional issues may affect historical World Heritage sites (WHS), where local communities and local people's attitudes towards the conservation of the cultural environment and a WHS status can diverge (Jimura, 2011). In such contexts, administrations and inhabitants have a dual challenge: 'on the one hand the urban fabric has to be preserved; on the other, support must be given to the vitality of the city's cultural heritage' (UNESCO, 2008:10). The sole preservation of buildings and monuments cannot save historic cities and could generate a 'museum' phenomenon (elitist revitalisation), thus freezing any development opportunities and hindering social revitalisation.

Our findings reveal that the PA is still tackling an initial step, requiring them to progress with the efforts in stimulating sharing and participation in the current review of the strategic plan of the city and the UNESCO management plan. Therefore, we deem that the role that the PA can play concerning initiatives aimed to leverage cultural heritage as an engine of development of Urbino's historical centre should be conceived as flexible and dynamic, being that the role of orchestrator should be merged (or transformed into) a mediator of interest.

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An overview of the early research on Covid-19 and SMEs

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Abstract

The 2020 opened with an exceptional and global pandemia. Data on Covid-19 have been presented in many studies and across media. A large amount of academic debates analyse the ongoing contagious disease and the real effects on the population, in the businesses and in the countries. The aim of this study is to present a scoping literature review focused on the Covid-19 crisis and small and medium enterprises (SMEs). During crisis, SMEs generally appear more vulnerable than large enterprises. Specifically, the review analyses the literature published within October 2021 in order to provide an overview of how scholars analyse the phenomenon principally in terms of topics, journals, authors, countries of analysis and methods.

Researchers searched in Scopus, Web of Science and Business Source Premier databases the keywords “Covid-19” or “Pandemi*” or “Epidem*”, and “Small and medium sized firm” or “SME” or “small business” or “small and medium firm” or “entrepreneur*”. After the due eliminations the resulted sample collected 784 papers. Using MS Excel, researchers manually code data and trace an overview about the evolutionary trends in the field. In a second phase, researchers analysed only the papers (235) published on the ABS-ranked journals.

Adopting the broader view (784 results), a quarter of studies receive funds for the analysis, 10% have been published in special issues and around 70% reaches journal outside the ABS ranking. Analysing only papers published in the ABS journals (235 papers), the review shows that quantitative research is the most widely used method for exploring Covid-19 and SMEs. While the quantitative and qualitative analysis cross many countries, the most analysed geographical contexts are located in Asia (China and India) and Europe

(e.g. UK, Italy). In terms of topics, 20 key words clusters emerge, 6 contain general key words and 14 group specific key words (i.e. economic impact and business survival, strategies, entrepreneur/entrepreneurship, digital/BI, finance, policy/regulation, innovation, gender, collaboration/engagement, sustainability, employee management, consumer/customer, individual impact, discrimination).

Despite the eight literature reviews published about SMEs and Covid-19, there is not a broad overview of topics on SMEs and entrepreneurship developed since the earliest signs of Covid-19 to date. In fact, all the existing reviews adopt a specific focus from technologies for SMEs to finance, female entrepreneurs and tactics and strategies to overcome the situation. Thus, we can contribute to the literature describing all that has been studied and highlighting the topics, issues and a future research agenda.

Keywords – Literature review, Covid-19, SMEs, Entrepreneurship.

Paper type – Academic Research Paper

1 Introduction

The global economy has been through several crises, such as the Great Depression of the 1930s and the financial crisis of 2008 and, more recently, the COVID-19 crisis (Tsilika et al., 2020). Since the early months of 2020, Covid-19 affected almost all countries and more than 50 million people around the world. It has governments operating in a context of radical uncertainty, and faced with difficult trade-offs given the health, economic and social challenges it raises.

It is widely recognized that crises generally have a major impact on SMEs and the one generated by Covid-19 is no different (OECD, 2020). In fact, compared to large enterprises, SMEs have been more vulnerable and affected by the Covid-19 crisis (OECD, 2021).

Themes related to crisis in business, management, entrepreneurship and accounting studies have been extensively addressed, also highlighting the peculiarities, strengths and weaknesses of SMEs in dealing with recession periods. However, the nature of the ongoing crisis is unprecedented: it has impacted on the economy globally, devastating entire industries, and has brought about a profound and widespread change in firms' production and sales systems, supply chains, working practices, consumer behaviour and lifestyles. Beyond the short-term repeated health and economic shocks, the long-term effects on human capital, productivity, global value chains and behaviour may be long-lasting.

The multitude of articles about Covid-19 and SMEs published since 2020 favours the emergence of literature reviews. Researchers found 8 literature reviews on this wide topic. Abed (2021) provides a general overview about papers published in the business field during the Covid-19 lockdown period in 2020 and then narrow the search examining the role of technology in business survival in the ongoing crisis. Outlining a way for SMEs to overcome the current Covid-19 crisis, Eggers (2020) researched what tactics and strategies can be applied and how these are impacted by other market players, in particular financing institutions and governments. García-Vidal et al. (2020) do not examined tactics and strategies, but what are the priorities of Ecuadorian SMEs in order to face post Covid-19 era. From an opposite point of view, Kuckertz and Brändle (2021) proposed a review with the aim to understand how the crisis has affected entrepreneurial activity. Also Ratten (2021) analysed the entrepreneurial activity but with a different purpose; she provided an overview of cultural, social and lifestyle forms of entrepreneurial activity with regard to the Covid-19 crisis. Two studies, referred directly to entrepreneurs. Castro and Zermeno (2021) identified the factors that comprise resilience to strengthen training programs for entrepreneurial skills; Villaseca et al (2021) aimed to understand women's approaches to acquiring financial and other resources is essential for closing the entrepreneurship gender gap (financing topics related to female entrepreneurs). Finally, Ciampi et al. (2021) developed a new SMEs default prediction modelling motivated by the enormous toll on SMEs caused by the 2007-2009 global financial crisis as well as the recent Covid-19 crisis.

Although the existing studies, we proposed a further literature review with a threefold aim. First, to provide a broad overview of topics on SMEs and entrepreneurship developed since the earliest signs of Covid-19 to date. Second, to give a serious analysis without predatory views and without studies that mentioned Covid-19 just as a contemporary and "cool" implication. Third, to trace trajectories also on topics and issues that authors have already investigated outside the Covid-19 perspective.

Specifically, the paper intends to respond to the following research questions:

RQ1. How is the literature about SMEs and Covid-19 developing?

RQ2. What is the focus of literature on SMEs and Covid-19 published on journals ranked by ABS?

RQ3. What are the research gaps and possible future directions?

We conducted a scoping literature review screening three databases, Scopus, Web of Science, Business Source Premier. Covid-19 OR Pandemi* OR Epidem* OR Coronavirus AND Small and medium sized firm OR SME* OR small business* OR small and medium firm OR entrepreneur*

are the keywords used to identify the studies. Keyword searches were performed within titles and, where possible, abstracts and keywords of the studies. The performed keyword search returned 1.125 studies. Duplicate articles were tracked and removed obtaining a final sample of 784 studies. The resulting articles were aggregated, tracked in a shared Excel file and full texts were obtained. Only 235 articles (over 784) are published in journals ranked ABS 2021. We analyse the 784 and 235 studies with the aim to identify the evolutionary trends in the field and define an analytical framework using the units: year of publication, research location, research method, issues and themes addressed by different studies, authors' affiliation, and journals. Because of space restrictions, results are summarised and the reference list includes only studies explicitly mentioned in the text. The complete list of the titles included in the literature review is available on request from the authors.

To the best of our knowledge, there are no broad literature reviews about SMEs and Covid-19. Thus, we contribute to the literature describing all that has been studied and highlighting the topics, methods of analysis and a research agenda for future explorations.

2 Method

A scoping literature review is an ideal way to investigate early research on Covid-19 and SMEs, as its methodology is designed to quickly and systematically identify the breadth of literature, clarify boundaries and definitions, summarize and disseminate research findings, and identify gaps in existing studies to guide subsequent primary research or a systematic literature review (Arksey and O'Malley 2005; Quinlan et al. 2014). On 31 October 2021 three databases (Web of Science, Scopus and Business Source Premier – EBSCO) containing a large number of international articles were searched in Titles and Abstracts using specific keywords in combination with the Boolean operators “AND” and “OR” (Table 1).

Table 1: Search strategies applied to the three databases on 31.10.2021

Database	Keywords	Search strategy	Results
Web of Science	Covid-19 OR Pandemi* OR Epidem* OR	[Title], English, Article, Conference article, review	55
Web of Science	Coronavirus AND Small and medium sized firm OR SME* OR small business* OR small and medium firm OR entrepreneur*	[Abstract], English, Article, Conference article, review	328
Scopus	firm OR SME* OR small business* OR small and medium firm OR entrepreneur*	[Title, Abstract, Keywords], English, Article, Conference article, review	674
Business Source Premier- EBSCO		[Title], English, Academic Journals	68
		Total	1.125
		Double	341
		RQ1	784
		Papers published in journals outside the ABS ranking	549
		RQ2	235

Only academic and conference papers written in English were included. Even the recent phenomenon, in total, 1.125 papers that matched the key terms were found in the databases. After removing duplications, 784 articles remained. The review was performed in two phases.

In the first phase, researchers explore the evidence of 784 articles in terms of document types, authors, the presence of funds for supporting the analysis and the target of publications (i.e. the name of the journal, the opportunity of contributing to a special issue, the presence in the ABS rank position of journals). This analysis aims to provide an overview about how the literature on SMEs and Covid-19 is developing (RQ1).

In the second phase, researchers focused the exploration just on papers published in the journals ranked by ABS. Thus, they removed the 549 articles published in journals outside the ABS ranking obtaining a final sample of 235 articles. Researchers chose ABS because it collects journals stretching across fields that are either central or salient to business and management studies. Moreover, this rating is not based purely on a weighted average of journal metrics. It is based upon peer review, editorial and expert judgements following the evaluation of many hundreds of publications and is informed by statistical information relating to citation. The idea to deepen the analysis in respect of the articles published in ranked journals would

limit the predatory publications and those articles that mentioned Covid-19 just as a contemporary and “cool” implication.

Both the researchers read the abstracts and the keywords of the 235 articles and, thus, they identified the focus of the analysis (RQ2). For each of this article they mapped the method of analysis, the countries where the exploration is performed (if any), the key words clusters as the sum of key words with a close meaning, the year of publication, the inclusion of the article in a special issue and the journals where the articles are published listed according to the ABS ranking.

3 Results

The responses to the research questions based on the analysis of the articles are presented below.

3.1 How is the literature about SMEs and Covid-19 developing?

In this section researchers address the RQ1 analysing the 784 articles collected. According to the Scopus classification, these “articles” are not just articles (645, 82,3%), but also conference papers (98, 13,5%), reviews (32, 4,1%), editorials (6, 0,8%) and letters (3, 0,4%). See Table 2 below. In particular, while articles are original researches or opinions published in a peer-reviewed journals, conference papers are original articles reporting data presented at a conference or symposium. Other document types refer to reviews that typically have an extensive bibliography, editorials as summaries of several articles and are usually listed at the beginning of the table of contents, and letters to or correspondence with the editor (i.e. individual letters or replies). But for the sake of simplicity, it is used the terms “article and paper” as a general reference to the results of this study.

Table 2 Types of documents

Document type	No.	%
Article	645	82,3%
Conference Paper	98	13,5%
Editorial Material	6	0,8%
Letter	3	0,4%
Review	32	4,1%
Total	784	100,0%

Analysing the authors, researchers notice that there are some occurrences. 21 authors published more than 2 articles each and they have

different affiliations. Prof. Rui Silva (from CETRAD, Universidade de Trás-os-Montes e Alto Douro Vila Real, Portugal), Prof. Sasha Kraus (from Faculty of Economics & Management, Free University of Bozen-Bolzano, Italy), Prof. Vanessa Ratten (from Department of Management, Sport and Tourism, La Trobe University, Melbourne, Australia), Prof. Grzegorz Zimon (from Department of Finance, Banking and Accountancy, The Faculty of Management, Rzeszow University of Technology, Rzeszow, Poland) are the 4 authors who produced more than 3 articles (Table 3).

Table 3 Authors of documents

Authors	No. of papers	No. of Authors
Silva R.	5	1
Kraus S.; Ratten V.; Zimon G.	4	3
Ahmad S.Z.; Akpan I.J.; Aniche E.T.; Apostolopoulos N.; Bon A.T.; Cowling, M; Fairlie R.; Franco M.; Giantari I.G.A.K.; Islam N.; Iwuoha V.C.; Kuckertz A.; Rodrigues M.; Setini M.; Shah, NA; Soomro, BA; Sousa N.	3	17
...	2	119
...	1	2.277

In terms of funds, the authors who wrote a quarter of articles had received funds from many institutions (Table 4). Probably the global interest on the topic raises the opportunity to get funds from e.g. Universities, Banks, Worldwide European and National institutions, Private organizations.

Table 4 Researches supported by funds

Funding	No.	%
No	584	74,5%
Yes	200	25,5%
Total	784	100,0%

The attention to Covid-19 and SMEs seems to be a widespread phenomenon. A large number of journals (486) published the 784 articles collected. However, 5 journals accepted about 100 papers. These journals publish not only theoretical and empirical research addressing aspects of entrepreneurship and small business economics, but, as the case of Sustainability (50 papers accepted) the focus is wider than entrepreneurship and SMEs. Moreover, emerging economies and Asian countries appear interested in how Covid-19 related to SMEs. In fact, the Journal of

Entrepreneurship in Emerging Economies published 14 papers and the Journal of Asian Finance, Economics and Business 11 (Table 5).

Table 5 Journals where documents are published

Journal	No. of Journals / Conf. Proceed.	No. of Papers
Sustainability	1	50
Small Business Economics	1	17
Journal of Entrepreneurship in Emerging Economies	1	14
International Small Business Journal: Researching Entrepreneurship	1	12
Journal of Asian Finance, Economics and Business	1	11
Emerald Emerging Markets Case Studies; Journal of Business Venturing Insights	2	8
Proceedings of the International Conference on Industrial Engineering and Operations Management; Lecture Notes in Networks and Systems; International Journal of Gender and Entrepreneurship; International Journal of Environmental Research and Public Health	4	7
E3S Web of Conferences; Academy of Entrepreneurship Journal; Technological Forecasting and Social Change	3	6
Journal	No. of Journals / Conf. Proceed.	No. of Papers
Journal of Small Business and Entrepreneurship; AIP Conference Proceedings; PLoS ONE; Finance Research Letters; Entrepreneurship and Sustainability Issues; International Journal of Hospitality Management	6	5
Revue International PME; Emerging Markets Finance and Trade; Environmental Science and Pollution Research; Uncertain Supply Chain Management; Proceedings of the European Conference on Innovation and Entrepreneurship, ECIE; Economic Annals-XXI; Journal of Enterprising Communities; Journal of Open Innovation: Technology, Market, and Complexity	8	4
...	24	3
...	50	2
...	384	1

Like any unknown phenomenon whose effects are feared in all aspects of daily life, Covid-19 received a great attention from the authors who would deepen how SMEs are related to it. Since the early months of 2020 there had been a diffusion of special issues about the topic. The 10% of papers are published in these special issues (Table 6).

Table 6 Documents published in special issues

Special Issue	No.	%
No	705	89,9%
Yes	79	10,1%
Total	784	100,0%

Though time from submission to publication of an academic paper can vary greatly, usually peer-reviewed processes takes more than one year. Thus, the number of papers collected for this study appears quite high. Researchers deepened this thought matching the journals with an internationally high recognized ranking. The ABS ranking is chosen as the point of reference for the analysis. As shown in Table 7, the 70% of papers fall outside the ranking: the 12,5% are conference papers and the 57,5% are published in journals that does not meet appropriate standards for scholarly rigour across the subject areas covered by the ABS ranking. The remaining 30% of papers are published in journals that ABS ranks from 1 to 4. According to the rating definition (CABS, 2021; Harvey et al., 2010), journals ranked 1, in general, publish research of a recognised, but more modest standard in their field. Papers are in many instances refereed relatively lightly according to accepted conventions. 2-rated journals publish original research of an acceptable standard. For these well regarded journals in their field, papers are fully refereed according to accepted standards and conventions. Three-quarters of the papers published in ABS ranked journals belongs to the 1 and 2 rank. The remaining quarter of articles are published in journals ranked 3 and 4. 3 rated journals publish original and well executed research papers and are highly regarded. These journals typically have good submission rates and are very selective in what they publish. Finally, all journals rated 4 (top journals) publish the most original and best-executed research. As top journals in their field, these journals typically have high submission and low acceptance rates.

Table 7 Journals according to the ABS ranking

ABS ranking	No.	%
1	106	13,5%
2	69	8,8%
3	52	6,6%
4	8	1,0%
n.a.	98	12,5%
No	451	57,5%
Total	784	100,0%

3.2 What is the focus of literature on SMEs and Covid-19 published on journals ranked by ABS?

The RQ2 focuses the analysis on 235 papers published on journals ranked by ABS. Because of space restrictions, this section provides an overview of the methods of analysis, the countries where the exploration is performed (if any) and the key words clusters as the sum of key words with a close meaning. Further analysis, such as the year of publication, the inclusion of the article in a special issue and the journals where the articles are published listed according to the ABS ranking are available upon request.

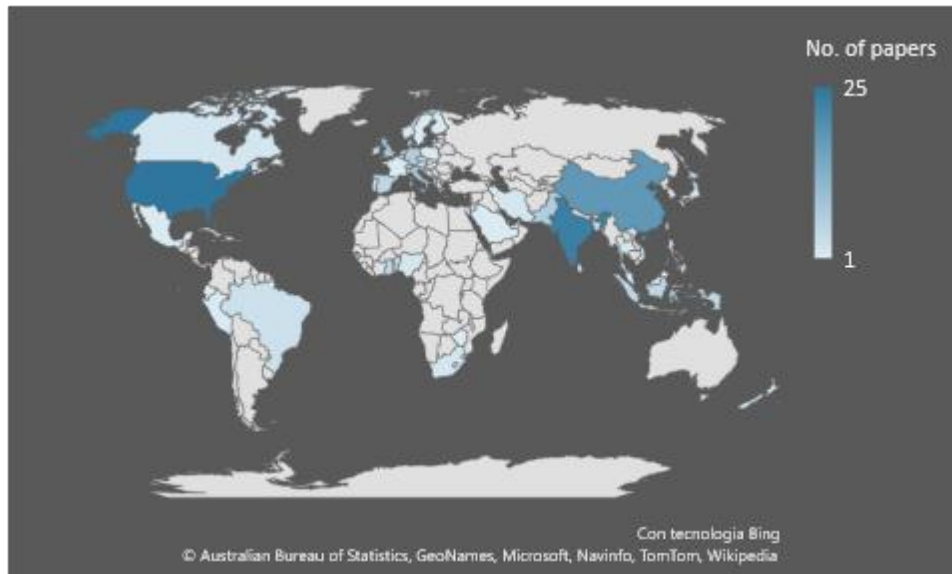
The majority of studies (42,1%) adopted quantitative methods for exploring Covid-19 and SMEs (Table 8). Data coming mainly from surveys (e.g. Brühlhart et al., 2020; Han et al., 2021; Muhammad, 2021; Li, 2021; Chiappa et al., 2021), or from international and national data sets (e.g. Torres et al., 2021; Huang et al., 2020; Kapinos, 2020), input–output models (e.g. Pedauga et al., 2021) and secondary evidences (e.g. Ejiogu et al., 2020). Results come from different methods, such as structural equation modeling (e.g. Baral et al., 2021; Rakshit et al., 2021; Grözinger et al., 2021), panel data (e.g. Martinez-Rodriguez et al., 2021) or fuzzy methods (e.g. Zhang et al., 2021). Others studies prefer qualitative explorations (27,7%) (e.g. Al Mansoori and Ahmad, 2021; Markovic et al., 2021; Tsilika et al., 2020) or conceptual arguments (e.g. Brunnermeier and Krishnamurthy, 2020; Chandler et al., 2021). Few studies adopted mixed methods (4,3%), revised the existent literature (3,4%) or introduced special issues (1,7%).

Table 8 Methods of analysis

Methods	No.	%
Quantitative	99	42,1%
Qualitative	65	27,7%
Conceptual	49	20,9%
Mixed methods	10	4,3%
Literature review	8	3,4%
Editorial of SI	4	1,7%
Total	235	100,0%

The 81% of studies describe different contexts. Sometimes authors conducted cross-countries analysis (8%), and in the other case they studied particular settings, such as countries in Asia (32%), in Europe (21%), in America (14%) and so on. The countries that reached a major attention were India, China, US, UK and Italy (Figure 1).

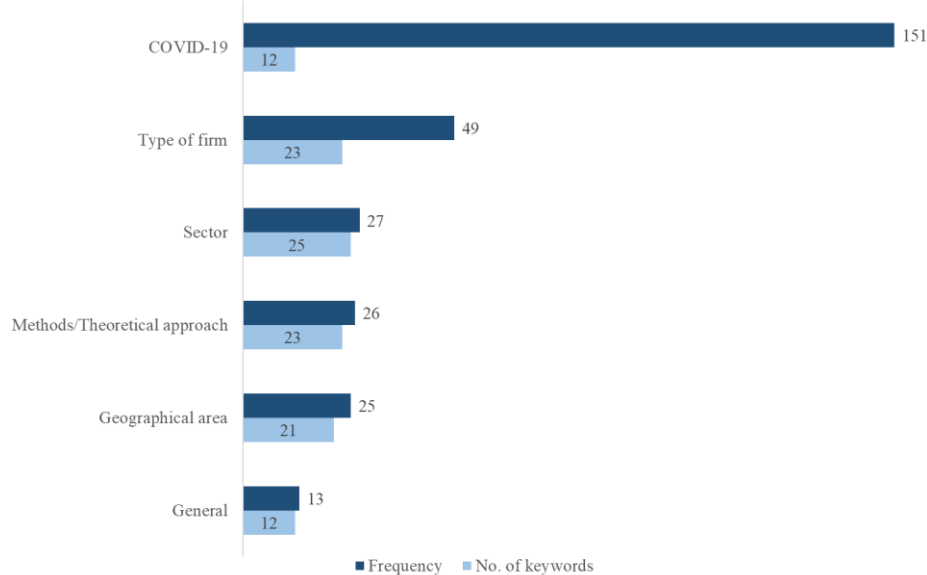
Figure 1 Countries of analysis



In terms of contents, researchers worked on key words. As there was a high probability that the first key words were Covid-19 or similar terms and SMEs, they collected the first three key words that authors provide from their works. They grouped the key words with a close meanings in 20 clusters, 6 general and 14 more specific. For each cluster, researchers calculated the frequency of the cited key words and the number of key words included.

General clusters refer to Covid-19, types of firm, sectors, methods and theoretical approaches, geographical areas, general (Figure 2). For example, researchers grouped into type of firm, key words such as SMEs, micro and small enterprises, new ventures, startups; in the cluster named sector, key words such as health care, accommodation, agriculture, hospitality, food, tourism and in the methods/theoretical approach cluster, key words such as resource-based view, core competence, dynamic capabilities, stakeholder theory, Small Business Pulse Survey, factor analysis, quantile regression and so on.

Figure 2 General key words clusters



Specific clusters present more interesting topics which cross different levels of phenomena. The economic impact and business survival is the cluster that received the higher number of key words, the strategies and the entrepreneur/entrepreneurship clusters follow. The economic impact and business survival cluster grouped key words that analyse the macro level (international and national contexts) and the meso level (firms). A high number of papers analysed the crisis, the socio-economic impact and the regression caused by Covid-19 (e.g. Muhammad, 2021). Others, focused on business survival, risk and continuity (e.g. Barlett and Morse, 2021). The cluster named strategies contains key words related to how firms (the meso level) could react to pandemia. Resilience is the most cited key word (e.g. Fath et al., 2021), but there are also proactivity, planning, global value chains, negotiation, business model innovation, diversification, cooperation and so on (e.g. Bivona and Cruz, 2021; Manwaring et al., 2021).

Other specific clusters grouped key words related to these topics (listed by the frequency – the number of key words): Digital and business intelligence, finance, policy and regulation, innovation, gender, collaboration and engagement, sustainability, employee management, consumer and customer, individual impact and discrimination. Also these clusters cross different levels of analysis.

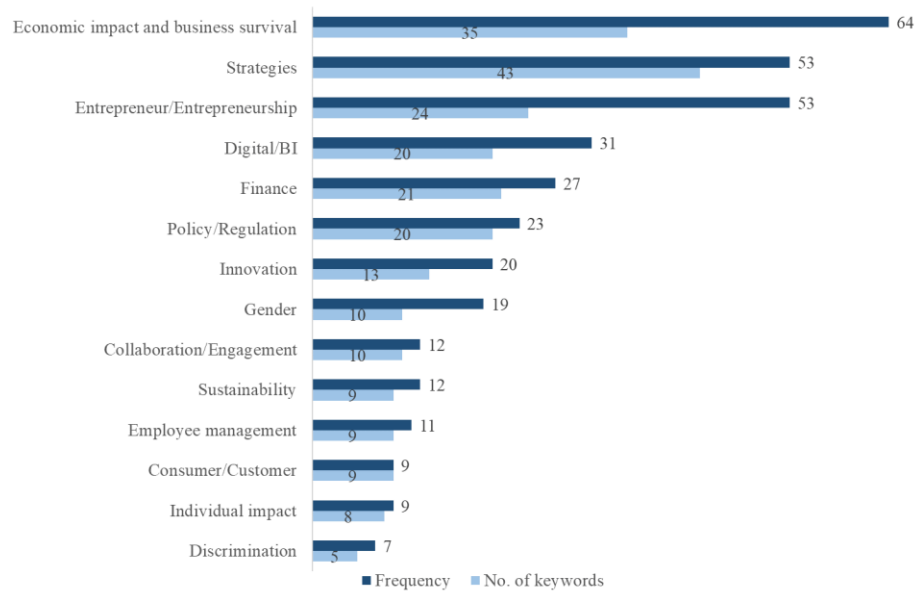
The policy and regulation cluster refer to macro issues such as Next Generation EU (e.g. Bellandi, 2020), the US Paycheck Protection Program (e.g. Li, 2021) and Cares act, recovery solutions, infrastructural projects and

so on. Collaboration and engagement cluster refer to communities, networks (e.g. Matharu and Juneja, 2021), communities of practice (e.g. Jones et al., 2021) and collectivism in general. Further, other two clusters refer to the macro context, such as sustainability and discrimination. Sustainability cluster contains key words related to circular economy (e.g. Herstatt and Tiwari, 2020), carbon tax, ecological emission, waste workers and more in general to corporate social responsibility (e.g. Le Thanh et al., 2021). Discrimination cluster refer to those papers focused on diversity, discriminatory barriers, institutional racism and the more soft topic of information frictions (e.g. Atkins et al., 2021; Croteau et al., 2021).

Clusters containing key words related to firms covered the following topics: digital and business intelligence, finance, innovation and consumer/customer. Many papers focused on these topics explore how firms could benefit from adopting or participate to particular platforms (digital, innovative and oriented to collect funds) (e.g. Laffey et al., 2021; Minoia and Jokela, 2021) or contexts (contamination labs, incubators) (e.g. Jones et al., 2021; Secundo et al., 2021). The gender cluster refer both to macro and meso level of analysis. In fact, studies on this topic refer to women and men entrepreneurs, but also to gender equality and financing gap.

Finally there are two clusters where keywords refer to the micro level of analysis, namely employee management and individual impact clusters. Some articles studied specific aspects of employee management such as the employment and self-employment, the job creation, the career turnover intention and the work from home (e.g. Lastauskas, 2021). The individual impact cluster collects key words and then papers that describe situations such as burnout, well-being, psychological impact and so on (e.g. Pathak and Joshi, 2021).

Figure 3 Specific key words clusters



3.3 What are the research gaps and possible future directions?

The review of studies related to Covid-19 and SMEs highlighted a large number of eligible topics to explore in future projects. These topics cross many disciplines and points of view: from macro contexts, to micro ones. Existing literature reviews focus their analysis on specific topics, such as technology (Abed, 2021), organizational tactics and strategies (Eggers, 2020), entrepreneurial activities (Ratten, 2021), finance (Ciampi et al., 2021; Villaseca et al., 2021), and others. The present study holds an open focus and consider studies from different countries (e.g., India, China, US, UK, Italy) and sectors (e.g., healthcare, agriculture, tourism, food). Moreover, from the analysis emerge how Covid-19 affects the macro contexts, such as the economic and social impacts and how regulations and policies could mitigate these effects. Sustainability, discrimination and gender issues are debated in worldwide councils but are worth of attention also for SMEs. These topics could address new researchers in the literature stream of SME, where the contexts over the firms are the field of analysis. For example the nowadays increased importance of domestic markets could push emergent studies to understand the role of SMEs in the shortest global value chains and how these firms face the supply problems. Moreover, the analysis of new forms of collaborations among firms, particular networks and more traditional districts could reveal insights of new strategies,

accounting and accountability methods, but also the emotions and feelings of being part of physical and online communities.

Considering the topics focused on the meso level, i.e. the firm, the review seems to highlight that Covid-19 does not stimulate topics outside the mainstream of SMEs literature. Before the pandemic, innovative topics (e.g., industry 4.0, big data and knowledge management, sustainability, innovation, startups, entrepreneurial education, business model, etc.) were being explored in depth. Covid-19 could foster researchers on the comprehension of human resource management practices (e.g., retention, home working, work-life balance, well-being) and about the creation of new business model related to Covid-19 issues and habits. Further studies could aim to understand what role the industry 4.0, big data, knowledge management and sustainability can play in the recovery phase.

At the micro level, i.e. individual, the review reveals topics that could address in depth analysis. For example, future research could deepen the role of entrepreneurial education in preparing potential entrepreneurs to manage uncertainty. Over the entrepreneur, further analysis could focus on the role of employees, their needs, wishes and the work-life balance, especially for women who most often are the ones who adjust their schedules and make compromises when the needs of children and other family members collide with work.

4 Conclusions

The high number of papers collected in this review suggest that Covid-19 stimulated researchers to analyse what effects the pandemic cause to SMEs and how firms could react to the ongoing crisis.

Adopting the broader view (RQ1 – 784 results), a quarter of studies receive funds for the analysis, 10% have been published in special issues and around 70% reaches journal outside the ABS ranking.

Analysing only papers published in the ABS journals (RQ2 – 235 papers), the review shows that quantitative research is the most widely used method for exploring Covid-19 and SMEs. While the quantitative and qualitative analysis cross many countries, the most analysed geographical contexts are located in Asia (China and India) and Europe (e.g. UK, Italy). Many studies focus their attention on developing countries across the world.

In terms of topics, 20 key words clusters emerge, 6 contain general key words (i.e. Covid-19, type of firm, sector, methods/theoretical approach, geographical area, general), 14 group specific key words (i.e. economic impact and business survival, strategies, entrepreneur/entrepreneurship, digital/BI, finance, policy/regulation, innovation, gender,

collaboration/engagement, sustainability, employee management, consumer/customer, individual impact, discrimination).

These topics suggest addresses for future research both inside and outside the mainstream of SMEs stream of literature. However, more in-depth analysis is needed to show what we are overlooking and what future research developments might be.

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European Small and Medium-Sized Enterprises in the pandemic context. Vulnerabilities and next challenges, measures contained in National Recovery and Resilience Plans

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Paper type – Long Abstract

This paper aims to show and analyse the measures directed to small and medium-sized enterprises (SMEs) contained in the National and Recovery and Resilience Plans (NRRP) of EU member states.

SMEs are the backbone of Europe's economy. They represent over 99% of all businesses in the EU. They employ around 83 million people, two out of every three employees, create 85% of all new jobs and generate about 53% of the EU value-added, account for more than half of Europe's GDP and

play a key role in adding value in every sector of the economy. So, they are essential to Europe's competitiveness and prosperity.

In general, the pandemic has affected firms of all sizes, but SMEs are particularly vulnerable for several reasons. In general, they have fewer resources to respond or be resilient, and they reveal some managerial weaknesses, with special regard to financial management and to other support functions (the so called technostructure). Many layoffs and closures occurred from the beginning of the pandemic. Many of them started remote work, many tried something different, like offering a new product or service, and a significantly greater share of them start delivering products and services at home. These adjustments require investments that small businesses often have difficulties to sustain. SMEs are more likely to run into financial difficulties and insolvency situations, and they must seek help from private and/or public support for financing and for many other management topics.

To face this situation, many European countries have introduced measures of financial support as guaranteed and soft loans. In addition, most European governments have taken measures of support to SMEs as grants and subsidies. The European Commission has also given a response to support small and medium-sized enterprises, financing the already existing COSME (Competitiveness of Enterprises and SMEs) programme and advancing several measures of the new SME strategy, to moderate the impact of the crisis.

After that, all EU member states, in their NRRP, have taken other specific measures, directed to SMEs, aimed at mitigating the impact of the Covid-19 pandemic and to program the next future of SMEs.

About the measures contained in the recovery plans, we have analysed the main intervention fields for SMEs, like digital and green, the relevance of the topic in the plans, the language used (keywords, and collocations), and finally, the resources allocated for the challenges of the next future. Most of the measures aim to introduce or increase the use of digital technologies, to accelerate the green transition process, to maintain employment and to help SMEs to address liquidity needs and get access to finance. The analysis of the measures directed to SMEs shows the direction which European Union has decided to undertake. Digitalisation, innovation, energy efficiency, green transition, are the main streets that EU has decided to run. This is demonstrated also by the language, the keywords and the collocations associated. "Support", "Digital", "Investments", "Environmental impact", are some of the most common words and expressions used in relation to SMEs. About the resources, in many cases, the amount of allocated resources reflects the weight that the topic of SMEs has for the plan, and it's

also possible to see that many countries with low levels of digitalisation, like Italy, Greece, Romania, Portugal and Slovakia, have mobilised a big amount of resources for digital and green investments for SMEs.

From these results it emerges that the support to SMEs is a baseline goal for the recovery plans, and that the digital transformation is the main goal of the intervention directed to SMEs, with a particular attention to the environmental impact and the energy efficiency, to lead two transitions at the same time: the digital and the green transition. These goals represent the main challenges of the next future of European SMEs: they underline the existence of a positive macroeconomic policy context.

These challenges also open many further research opportunities for SMEs management scholars, from our point of view with regard to corporate finance, accounting, and organizational studies, paying attention to some across-the-disciplines topics already emerged but still to develop in deeper ways (e.g. stakeholder management, sustainability in its different meanings, employability, and flexibility).

The paper is composed of four sections: the introduction, which contains the overview and the covid impact analysis about SMEs in European Union; the second section with the interventions fields of the measures contained in the recovery plans; the third section with the analysis of the relevance of the topic, of the language used and of the allocated resources, with the related results; the fourth with some brief conclusions and some research perspectives.

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